SIEMENS

Data sheet 3RT2027-2AF00



power contactor, AC-3e/AC-3, 32 A, 15 kW / 400 V, 3-pole, 110 V AC, 50 Hz, auxiliary contacts: 1 NO + 1 NC, spring-loaded terminal, size: S0 $\,$

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S0
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 	6.3 W
 at AC in hot operating state per pole 	2.3 W
without load current share typical	2.5 W
type of calculation of power loss depending on pole	quadratic
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 AC	8,3g / 5 ms, 5,3g / 10 ms
shock resistance with sine pulse	
• at AC	13,5g / 5 ms, 8,3g / 10 ms
mechanical service life (operating cycles)	
 of contactor typical 	10 000 000
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000
 of the contactor with added auxiliary switch block typical 	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	
Weight	0.461 kg
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 %

Environmental footprint	
Environmental Product Declaration(EPD)	Yes
Global Warming Potential [CO2 eq] total	74.2 kg
Global Warming Potential [CO2 eq] during manufacturing	1.9 kg
Global Warming Potential [CO2 eq] during mandiacturing Global Warming Potential [CO2 eq] during operation	72.4 kg
Global Warming Potential [CO2 eq] after end of life	-0.117 kg
Main circuit	••••••••••••••••••••••••••••••••••••••
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
at AC-3 rated value maximum	690 V
 at AC-3e rated value maximum 	690 V
operational current	
• at AC-1 at 400 V at ambient temperature 40 °C rated value	50 A
• at AC-1	F0.A
— up to 690 V at ambient temperature 40 °C rated value	50 A 42 A
 up to 690 V at ambient temperature 60 °C rated value at AC-3 	42 A
■ at 400 V rated value	32 A
— at 500 V rated value	32 A
— at 690 V rated value	21 A
• at AC-3e	
— at 400 V rated value	32 A
— at 500 V rated value	32 A
— at 690 V rated value	21 A
• at AC-4 at 400 V rated value	22 A
• at AC-5a up to 690 V rated value	44 A
• at AC-5b up to 400 V rated value	26.5 A
• at AC-6a	
— up to 230 V for current peak value n=20 rated value	30.8 A
— up to 400 V for current peak value n=20 rated value	30.8 A
— up to 500 V for current peak value n=20 rated value	27 A
— up to 690 V for current peak value n=20 rated value	21 A
• at AC-6a	00.5 A
— up to 230 V for current peak value n=30 rated value	20.5 A
— up to 400 V for current peak value n=30 rated value	20.5 A
— up to 500 V for current peak value n=30 rated value	18 A
— up to 690 V for current peak value n=30 rated value minimum cross-section in main circuit at maximum AC-1 rated	18 A 10 mm²
value operational current for approx. 200000 operating cycles at	
AC-4	
• at 400 V rated value	12 A
at 690 V rated value	12 A
operational current	
at 1 current path at DC-1 at 24 V rated value	35 A
— at 24 V rated value — at 60 V rated value	35 A 20 A
— at 110 V rated value	4.5 A
— at 220 V rated value	1A
— at 440 V rated value	0.4 A
— at 600 V rated value	0.25 A
with 2 current paths in series at DC-1	
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	5 A
— at 440 V rated value	1 A
— at 600 V rated value	0.8 A

	 with 3 current paths in series at DC-1 	
at 60 V rated value	*	35 A
at 110 V rated value		
at 220 V rated value		
at 500 V rated value		
- at 12 vrretor yath at DC-3 at DC-5 - at 62 V rated value - at 620 V rated value - at 420 V rated value - at 420 V rated value - at 440 V rated value - at 600 V rated value - at 100 V rated value - at 600		
	·	20 A
		5 A
■ twith 2 current paths in series at DC-3 at DC-5 ■ at 24 V rated value ■ at 60 V rated value ■ at 60 V rated value ■ at 110 V rated value ■ at 120 V rated value ■ at 140 V rated value ■ at 140 V rated value ■ at 440 V rated value ■ at 440 V rated value ■ at 60 V rated value ■ at 600 V rated value ■ at 400 V rated value ■ at 400 V rated value ■ at 400 V rated value ■ at 600 V rated value ■ at	— at 220 V rated value	1 A
- with 2 current paths in series at DC-3 at DC-5 - at 24 V rated value - at 100 V rated value - at 110 V rated value - at 110 V rated value - at 1440 V rated value - at 1440 V rated value - at 600 V rated value - at 600 V rated value - at 220 V rated value - at 110 V rated value - at 140 V rated value - at 160 V rated	— at 440 V rated value	0.09 A
	— at 600 V rated value	0.06 A
	• with 2 current paths in series at DC-3 at DC-5	
	— at 24 V rated value	35 A
at 220 V rated value	— at 60 V rated value	35 A
at 440 V rated value	— at 110 V rated value	15 A
### ### ### ### ### ### ### ### ### ##	— at 220 V rated value	3 A
• with 3 current paths in series at DC-3 at DC-5 — at 24 V rated value 35 A — at 110 V rated value 35 A — at 220 V rated value 10 A — at 400 V rated value 0.6 A — at 600 V rated value 0.6 A operating power • at AC-3 — at 230 V rated value 15 kW — at 400 V rated value 15 kW — at 400 V rated value 15 kW — at 500 V rated value 15 kW — at 500 V rated value 15 kW — at 500 V rated value 15 kW — at 400 V rated value 15 kW — at 500 V rated value 15 kW — at 400 V rated value 15 kW — at 400 V rated value 15 kW — at 690 V rated value 15 kW — at 690 V rated value 15 kW — at 690 V rated value 16 kW — at 690 V rated value 18.5 kW Operating power for approx. 200000 operating cycles at AC-4 • at 400 V rated value 10.3 kW Operating apparent power at AC-6a • up to 230 V for current peak value n=20 rated value 21.3 kVA • up to 500 V for current peak value n=20 rated value 23.3 kVA • up to 500 V for current peak value n=20 rated value 25 kVA Operating apparent power at AC-6a • up to 500 V for current peak value n=30 rated value 25 kVA Operating apparent power at AC-6a • up to 500 V for current peak value n=30 rated value 25 kVA Operating apparent power at AC-6a • up to 500 V for current peak value n=30 rated value 21.5 kVA • up to 500 V for current peak value n=30 rated value 14.2 kVA • up to 500 V for current peak value n=30 rated value 14.2 kVA • up to 500 V for current peak value n=30 rated value 14.2 kVA • up to 500 V for current peak value n=30 rated value 14.2 kVA • up to 500 V for current peak value n=30 rated value 14.2 kVA • up to 500 V for current peak value n=30 rated value 15.5 kVA • up to 500 V for current peak value n=30 rated value 14.2 kVA	— at 440 V rated value	0.27 A
at 24 V rated value 35 A 36 A	— at 600 V rated value	0.16 A
- at 60 V rated value	 with 3 current paths in series at DC-3 at DC-5 	
- at 110 V rated value	— at 24 V rated value	35 A
- at 220 V rated value	— at 60 V rated value	
- at 440 V rated value	— at 110 V rated value	
operating power • at AC-3 — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 690 V rated value — at 400 V rated value • at AC-3e — at 230 V rated value • at AC-3e — at 230 V rated value • at AC-3e — at 230 V rated value • at AC-3e — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 500 V rated value — at 500 V rated value — at 690 V rated value — at 690 V rated value • at 690 V rated value • at 690 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value • at 690 V rated value • up to 230 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=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 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value	— at 220 V rated value	
• at AC-3 — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 500 V rated value — at 690 V rated value • at AC-3e — at 230 V rated value • at 400 V rated value — at 690 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value • at 690 V rated value • at 690 V rated value • at 690 V rated value • up to 230 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 690 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 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 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value		0.6 A
- at 230 V rated value 7.5 kW - at 400 V rated value 15 kW - at 500 V rated value 15 kW - at 500 V rated value 18.5 kW - at 690 V rated value 18.5 kW - at 690 V rated value 7.5 kW - at 400 V rated value 15 kW - at 400 V rated value 15 kW - at 500 V rated value 15 kW - at 500 V rated value 15 kW - at 690 V rated value 15 kW - at 690 V rated value 16 kW - at 690 V rated value 17 kW - at 690 V rated value 18.5 kW - at 690 V rated value 18.5 kW - at 690 V rated value 10.3 kW - at 690 V for current peak value n=20 rated value 12.2 kVA - at 690 V for current peak value n=20 rated value 12.3 kVA - at 060 V for current peak value n=20 rated value 25 kVA - at 060 V for current peak value n=30 rated value 15.5 kVA - at 060		
at 400 V rated value		7.5 144
- at 500 V rated value - at 690 V rated value 18.5 kW • at AC-3e - at 230 V rated value - at 400 V rated value - at 500 V rated value - at 690 V rated value • at 400 V rated value • at 690 V rated value • up to 230 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 23.3 kVA • up to 690 V for current peak value n=30 rated value 25 kVA operating apparent power at AC-6a • up to 230 V for current peak value n=30 rated value 41.2 kVA • up to 500 V for current peak value n=30 rated value 55 kVA • up to 500 V for current peak value n=30 rated value 41.2 kVA • up to 690 V for current peak value n=30 rated value 55 kVA • up to 690 V for current peak value n=30 rated value 41.2 kVA • up to 690 V for current peak value n=30 rated value 55 kVA • up to 690 V for current peak value n=30 rated value 41.2 kVA • up to 690 V for current peak value n=30 rated value 55 kVA		
- at 690 V rated value • at AC-3e - at 230 V rated value - at 400 V rated value - at 690 V rated value • at 400 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value - at 690 V rated value • at 690 V rated value • at 690 V rated value - at 690 V rated v		
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- at 230 V rated value - at 400 V rated value - at 500 V rated value - at 690 V rated value		10.0 KW
- at 400 V rated value 15 kW - at 690 V rated value 18.5 kW operating power for approx. 200000 operating cycles at AC-4 • at 400 V rated value 6 kW • at 690 V rated value 10.3 kW operating apparent power at AC-6a • up to 230 V for current peak value n=20 rated value 21.3 kVA • up to 400 V for current peak value n=20 rated value 23.3 kVA • up to 500 V for current peak value n=20 rated value 25 kVA operating apparent power at AC-6a • up to 230 V for current peak value n=30 rated value 25 kVA operating apparent power at AC-6a • up to 230 V for current peak value n=30 rated value 25 kVA operating apparent power at AC-6a • up to 400 V for current peak value n=30 rated value 14.2 kVA • up to 500 V for current peak value n=30 rated value 21.5 kVA • up to 690 V for current peak value n=30 rated value 21.5 kVA • up to 690 V for current peak value n=30 rated value 21.5 kVA • up to 690 V for current peak value n=30 rated value 21.5 kVA		7.5 kW
- at 500 V rated value - at 690 V rated value operating power for approx. 200000 operating cycles at AC- 4 • at 400 V rated value • at 690 V rated value • at 900 V rated value 10.3 kW 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 500 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value 25 kVA operating apparent power at AC-6a • up to 230 V for current peak value n=30 rated value • up to 400 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value		
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at 400 V rated value at 690 V rated value 10.3 kW 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 23.3 kVA up to 690 V for current peak value n=20 rated value 25 kVA operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value 4.2 kVA up to 500 V for current peak value n=30 rated value 14.2 kVA up to 500 V for current peak value n=30 rated value 15.5 kVA short-time withstand current in cold operating state up to 40 °C	operating power for approx. 200000 operating cycles at AC-	
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• up to 500 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value 25 kVA operating apparent power at AC-6a • up to 230 V for current peak value n=30 rated value • up to 400 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C		
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operating apparent power at AC-6a • up to 230 V for current peak value n=30 rated value • up to 400 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value \$15.5 kVA \$hort-time withstand current in cold operating state up to 40 °C	·	
 up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C 		20
 up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C 		8.1 kVA
 up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C 		
• up to 690 V for current peak value n=30 rated value 21.5 kVA short-time withstand current in cold operating state up to 40 °C		15.5 kVA
40 °C		21.5 kVA
• limited to 1 s switching at zero current maximum 499 A: Use minimum cross-section acc. to AC-1 rated value		
Too 7, 500 minimum cross social ass. to 70 minimum cross social ass. to 70 minimum cross social ass.	 limited to 1 s switching at zero current maximum 	499 A; Use minimum cross-section acc. to AC-1 rated value
• limited to 5 s switching at zero current maximum 341 A; Use minimum cross-section acc. to AC-1 rated value	 limited to 5 s switching at zero current maximum 	341 A; Use minimum cross-section acc. to AC-1 rated value
• limited to 10 s switching at zero current maximum 260 A; Use minimum cross-section acc. to AC-1 rated value	 limited to 10 s switching at zero current maximum 	260 A; Use minimum cross-section acc. to AC-1 rated value
• limited to 30 s switching at zero current maximum 199 A; Use minimum cross-section acc. to AC-1 rated value	 limited to 30 s switching at zero current maximum 	199 A; Use minimum cross-section acc. to AC-1 rated value
• limited to 60 s switching at zero current maximum 162 A; Use minimum cross-section acc. to AC-1 rated value	Iimited to 60 s switching at zero current maximum	162 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency		
• at AC 5 000 1/h	• at AC	5 000 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	AC
control supply voltage at AC	
at 50 Hz rated value	110 V
operating range factor control supply voltage rated value of	
magnet coil at AC	
• at 50 Hz	0.8 1.1
apparent pick-up power of magnet coil at AC	
• at 50 Hz	77 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.82
apparent holding power of magnet coil at AC	
● at 50 Hz	9.8 VA
inductive power factor with the holding power of the coil	
● at 50 Hz	0.25
closing delay	
• at AC	8 40 ms
opening delay	
• at AC	4 16 ms
arcing time	10 10 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous	1
contact	1
number of NO contacts for auxiliary contacts instantaneous 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
• 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	
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	1 A
at 125 V rated value	0.9 A
at 220 V rated value	0.3 A
at 600 V rated value	0.1 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	27 A
at 600 V rated value	27 A
yielded mechanical performance [hp]	
• for single-phase AC motor	

- nt 2007 Winder value	-14404001/	O.b.
	— at 110/120 V rated value	2 hp
		5 hp
	• for 3-phase AC motor	
	— at 200/208 V rated value	10 hp
— at 575900 V rated value Context traing of auxiliary contacts according to UL About 15 to 16	— at 220/230 V rated value	10 hp
contact rating of a walliary contacts according to UL. A600 / P600 Consign of the fuse link	— at 460/480 V rated value	20 hp
Service protection Service protection of the fuse link	— at 575/600 V rated value	25 hp
	contact rating of auxiliary contacts according to UL	A600 / P600
	Short-circuit protection	
	design of the fuse link	
— with bype of assignment 2 required 9G: 50A (690V, 100KA), aM: 25A (690V, 100KA), BSS8: 50A (415V. 80KA) mounting position +7.180° rotation possible on vartical mounting surface; can be tilted forward and backward by 47-22° on vertical mounting surface; can be tilted forward and backward by 47-22° on vertical mounting surface; can be tilted forward and backward by 47-22° on vertical mounting surface; can be tilted forward and backward by 47-22° on vertical mounting surface; can be tilted forward and backward by 47-22° on vertical mounting surface; can be tilted forward and backward by 47-22° on vertical mounting surface; can be tilted forward and backward by 47-22° on vertical mounting surface; can be tilted forward and backward by 47-22° on vertical mounting surface; can be tilted forward and backward by 47-22° on vertical mounting surface; can be tilted forward and backward by 47-22° on vertical mounting surface; can be tilted forward and backward by 47-22° on vertical mounting surface; can be tilted forward and backward by 47-22° on vertical mounting surface; can be tilted forward and backward by 47-22° on vertical mounting surface; can be tilted forward and backward by 47-22° on vertical mounting surface; can be tilted forward and backward by 47-22° on vertical mounting surface; can be tilted forward and backward by 47-22° on vertical mounting surface; can be tilted forward and backward by 47-22° on vertical mounting surface; can be tilted forward and backward by 47-22° on vertical mounting surface; can be tilted forward and backward by 47-22° on vertical mounting surface; can be tilted forward and backward by 47-22° on vertical mounting surface; can be tilted forward and backward by 47-22° on vertical mounting surface; can be tilted forward and backward by 47-22° on vertical mounting surface; can be tilted forward and backward by 47-22° on vertical mounting surface; can be tilted forward and backward by 47-22° on	 for short-circuit protection of the main circuit 	
For short-circuit protection of the auxiliary switch required sizilation/incomtring dimensions 100 mm 100	 — with type of coordination 1 required 	gG: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A (415V,80kA)
	 — with type of assignment 2 required 	gG: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA)
mounting position +f.190° realization possible on vertical mounting surface; can be tilled forward and backward by 4-f.22.5° on vertical mounting surface; can be tilled forward and backward by 4-f.22.5° on vertical mounting surface; can be tilled forward and backward by 4-f.22.5° on vertical mounting surface; can be tilled forward and backward by 4-f.22.5° on vertical mounting surface; can be tilled forward and backward by 4-f.22.5° on vertical mounting surface; can be tilled forward and backward by 4-f.22.5° on vertical mounting surface; can be tilled forward and backward by 4-f.22.5° on vertical mounting surface; can be tilled forward and backward by 4-f.22.5° on vertical mounting surface; can be tilled forward and backward by 4-f.22.5° on vertical mounting surface; can be tilled forward and backward by 4-f.22.5° on vertical mounting surface; can be tilled forward and backward by 4-f.22.5° on vertical mounting surface; can be tilled forward and backward by 4-f.22.5° on vertical mounting surface; can be tilled forward and backward by 4-f.22.5° on vertical mounting surface; can be tilled forward and backward by 4-f.22.5° on vertical mounting surface; can be tilled forward and stream. - forwards 10 mm - forwards 20 mm - forwards 50 mm - forwards 50 mm <	• for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)
backward by +/- 225° on vertical mounting surface fastening method sackward by +/- 225° on vertical mounting surface fastening method sackward by +/- 225° on vertical mounting surface sackward by +/- 225° on vertical power sackward by +/225° on vertical power sackward by +/225° on vertica	Installation/ mounting/ dimensions	
fishing method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 80781 height 102 mm dopth 97 mm required spacing Promato — forwards 10 mm — downwards 10 mm — forwards 10 mm — at the side 6 mm — at the side 6 mm — downwards 10 mm — forwards 10 mm — forwards 10 mm — forwards 10 mm — downwards 10 mm — forwards 10 mm — forwards 10 mm — forwards 10 mm — forwards 20 mm — forwards 10 mm — forwards 10 mm — formards 20 mm — forwards 20 mm — formall contact 20 mm • for main cortect 20 mm	mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and
height 45 mm width 45 mm doth 97 mm required spacing ************************************		·
width 45 mm dopth 97 mm required spacing 97 mm - forwards 10 mm - forwards 10 mm - downwards 10 mm - at the side 0 mm - forwards 10 mm - upwards 10 mm - at the side 6 mm - downwards 10 mm - for rive parts 10 mm - for rive parts 10 mm - for rowards 10 mm - downwards 10 mm - for main current circuit spring-loaded terminals * for auxiliary and control circuit spring-loaded terminals • for main current circuit spring-loaded terminals • for main cortacts Spring-loaded terminals • for good conductor for auxiliary contacts Spring-loaded terminals	<u> </u>	
depth 97 mm required spacing required spacing • with side-by-side mounting 10 mm — forwards 10 mm — downwards 10 mm — at the side 0 mm • for grounded parts 10 mm — upwards 10 mm — at he side 6 mm — downwards 10 mm • for live parts 10 mm — forwards 10 mm — upwards 10 mm — downwards 10 mm — at the side 6 mm — at the side 6 mm — at the side 6 mm Pormain current circuit spring-loaded terminals • for main current circuit spring-loaded terminals • for main current circuit spring-loaded terminals • for main current circuit spring-lybe terminals • for main current circuit spring-lybe terminals • for main contacts 2 (1 10 mm²) - solid or stranded 2x (1 10 mm²) - for main contacts 2x (1 10 mm²)		
Torquired spacing		
• with side-by-side mounting - forwards - upwards - at the side - forgrounded parts - forwards - forwards - forwards - forwards - forwards - forwards - upwards - at the side - downwards - at the side - downwards - at the side - downwards - for live parts - for live parts - forwards - upwards - forwards - upwards - forwards - upwards - forwards - upwards - downwards - upwards - downwards - upwards - at the side - downwards - at the side - for main current circuit - for auxiliary and controt circuit - so for auxiliary and controt circuit - so for auxiliary and controt circuit - at contactor for auxiliary contacts - of magnet coil type of connectable conductor cross-sections - for main contacts - solid - solid or stranded - finely stranded with core end processing - for AVR cables for main contacts - solid or stranded - finely stranded without core end processing - finely stranded without core end	depth	97 mm
forwards	required spacing	
- upwards	with side-by-side mounting	
- downwards - at the side 0 mm • for grounded parts - 10 mm - upwards 10 mm - at the side 6 mm - at the side 6 mm - at the side 6 mm • for live parts 10 mm • for live parts 10 mm • for live parts 10 mm - upwards 10 mm - upwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 10 mm - at the side 6 mm Connections/Terminals • type of electrical connection • for main current circuit spring-loaded terminals • for auxiliary and control circuit spring-loaded terminals • of magnet coil trainals	— forwards	10 mm
The side O mm	— upwards	10 mm
• for grounded parts — forwards — upwards — at the side — downwards • for live parts — forwards — upwards — upwards — ownwards • for live parts — forwards — upwards — upwards — upwards — upwards — upwards — downwards — to mm — downwards — to mm — at the side — for mim — at the side — for main current circuit • for auxiliary and control circuit • for auxiliary and control circuit • of auxiliary and control circuit • of majn current of re auxiliary contacts • of majn current of re auxiliary contacts • of majn contacts — solid — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts — solid • stranded • finely stranded without core end processing • for fawG cables for main contacts • solid • stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded with core end processing • fi	— downwards	10 mm
- forwards	— at the side	0 mm
- upwards - at the side - downwards 10 mm • for live parts - forwards 10 mm • for live parts - upwards 10 mm - downwards 10 mm - downwards 10 mm - downwards 10 mm - at the side 6 mm Connections/ Terminals type of electrical connection • for main current circuit • at contactor for auxiliary contacts • of magnet coil - solid - solid or stranded - finely stranded with core end processing • for AWG cables for main contacts • solid • stranded • finely stranded with core end processing	 for grounded parts 	
- at the side — downwards — 10 mm — 10	— forwards	10 mm
- downwards • for live parts - forwards - upwards - upwards - downwards - at the side - at the side - at the side - for main current circuit • for main current circuit • at contactor for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil - solid - solid or stranded - finely stranded without core end processing • finely stranded without core end processing	— upwards	10 mm
• for live parts — forwards — upwards — downwards — at the side Connections/ Terminals type of electrical connection • for main current circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-section for main contacts — solid — finely stranded with core end processing • finely stranded with core end processing	— at the side	6 mm
- forwards 10 mm 1	downwards	10 mm
- upwards 10 mm 10	• for live parts	
- downwards - at the side connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts - solid - solid or stranded - finely stranded with core end processing • for AWC cables for main contacts • solid • stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • solid or stranded • finely stranded without core end processing • finely stranded without core end processing • solid or stranded • finely stranded without core end processing	— forwards	10 mm
Type of electrical connections for amain current circuit of or auxiliary and control circuit of main current circuit of main current circuit of magnet coil type of connectable conductor cross-sections of magnet coil type of connectable conductor cross-sections of main contacts of main cont	— upwards	10 mm
type of electrical connection • for main current circuit spring-loaded terminals • for auxiliary and control circuit spring-loaded terminals • at contactor for auxiliary contacts Spring-type terminals • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts - solid - solid or stranded - finely stranded with core end processing • for AWG cables for main contacts - solid • solid - solid or stranded without core end processing • for AWG cables for main contacts • solid • finely stranded with ore end processing - solid • stranded • finely stranded with ore end processing • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core and processing • finely stranded without core end processing • finely stranded without core end processing • solid or stranded • finely stranded without core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing	— downwards	10 mm
type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts - solid - solid or stranded - finely stranded with core end processing • stranded • stranded • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • finely stranded without core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • finely stranded without core end processing	— at the side	6 mm
• for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil • por auxiliary contacts • of magnet coil • spring-type terminals • of magnet coil • spring-type terminals • of magnet coil • spring-type terminals • of magnet coil • spring-type terminals • of magnet coil • spring-type terminals • of magnet coil • spring-type terminals • spring-type	Connections/ Terminals	
for auxiliary and control circuit at contactor for auxiliary contacts of magnet coil Spring-type terminals of magnet coil Spring-type terminals type of connectable conductor cross-sections	type of electrical connection	
 • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil Spring-type terminals Spring-type terminals Spring-type terminals Spring-type terminals type of connectable conductor cross-sections • for main contacts — solid — solid or stranded — finely stranded with core end processing — finely stranded without core end processing — for AWG cables for main contacts • solid • solid • solid • stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded		spring-loaded terminals
 at contactor for auxiliary contacts of magnet coil Spring-type terminals type of connectable conductor cross-sections for main contacts — solid — solid or stranded — finely stranded with core end processing for AWG cables for main contacts 1 10 mm²) a for AWG cables for main contacts e solid for AWG cables for main contacts solid stranded finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing finely stranded without core end processing finely stranded with core end processing finely stranded without end processing finely stranded w	for auxiliary and control circuit	
• of magnet coil type of connectable conductor cross-sections • for main contacts - solid - solid or stranded - finely stranded with core end processing • for AWG cables for main contacts • solid • stranded • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • solid or stranded • finely stranded with core end processing • finely stranded without core end processing	•	
type of connectable conductor cross-sections • for main contacts — solid — solid 2x (1 10 mm²) — solid or stranded 2x (1 10 mm²) — finely stranded with core end processing — finely stranded without core end processing • for AWG cables for main contacts • solid • stranded • stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • finely stranded without core end processing	•	
 for main contacts — solid — solid or stranded — finely stranded with core end processing — finely stranded without core end processing — for AWG cables for main contacts (a) for AWG cables for main contacts (b) solid (c) stranded (d) stranded (e) finely stranded with core end processing (e) finely stranded with core end processing (e) finely stranded without core end processing (e) finely stranded without core end processing (e) finely stranded (e) finely stranded (finely stranded) (finely stranded)<td></td><td></td>		
- solid - solid or stranded - finely stranded with core end processing - finely stranded without core end processing - finely stranded without core end processing - for AWG cables for main contacts of the for AWG cables for main contacts connectable conductor cross-section for main contacts of solid - stranded - finely stranded with core end processing - finely stranded without core end processing - finely stranded without core end processing - finely stranded with core end processing - finely stranded with core end processing - finely stranded with core end processing - finely stranded without c	••	
- solid or stranded - finely stranded with core end processing - finely stranded without core end processing - finely stranded without core end processing • for AWG cables for main contacts • solid • stranded • stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • solid • finely stranded without core end processing • finely stranded without core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • finely stranded without core end processing		2x (1 10 mm²)
- finely stranded with core end processing - finely stranded without core end processing • for AWG cables for main contacts • solid • stranded • stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • solid or stranded • finely stranded with core end processing • finely stranded without core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded conductor cross-sections		
 — finely stranded without core end processing ● for AWG cables for main contacts ○ solid ● stranded ● finely stranded with core end processing ● finely stranded with core end processing ● finely stranded without core end processing ● finely connectable conductor cross-section for auxiliary contacts ● solid or stranded ● finely stranded with core end processing ● finely stranded without core end processing ● finely stranded without core end processing ● finely stranded without core end processing ● finely connectable conductor cross-sections 		
 ◆ for AWG cables for main contacts 2x (18 8) connectable conductor cross-section for main contacts ♦ solid ♦ stranded ♦ finely stranded with core end processing ♦ finely stranded without core end processing ♦ finely stranded without core end processing 1 6 mm² connectable conductor cross-section for auxiliary contacts ♦ solid or stranded ♦ finely stranded with core end processing ♦ finely stranded without core end processing ♦ finely stranded without core end processing ♦ finely stranded without core end processing ♦ 5 2.5 mm² ♦ finely stranded without core end processing ♦ 5 2.5 mm² 		
connectable conductor cross-section for main contacts • solid • stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • for connectable conductor cross-sections	•	
 solid stranded finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing solid connectable conductor cross-sections 		(
 stranded finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing 2.5 mm² finely stranded without core end processing 2.5 mm² 		1 10 mm²
 finely stranded with core end processing finely stranded without core end processing connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing type of connectable conductor cross-sections 		
 finely stranded without core end processing connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing 2.5 mm² finely stranded without core end processing 2.5 mm² 		
connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing type of connectable conductor cross-sections		
 solid or stranded finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing type of connectable conductor cross-sections 		1 V
 finely stranded with core end processing finely stranded without core end processing type of connectable conductor cross-sections 		0.5 2.5 mm²
• finely stranded without core end processing 0.5 2.5 mm ² type of connectable conductor cross-sections		
type of connectable conductor cross-sections		
		0.0 2.0 IIIII
	for auxiliary contacts	

 — solid or stranded 	2x (0.5 2.5 mm²)
 finely stranded with core end processing 	2x (0.5 1.5 mm²)
 finely stranded without core end processing 	2x (0.5 2.5 mm²)
 for AWG cables for auxiliary contacts 	2x (20 14)
AWG number as coded connectable conductor cross section	
 for main contacts 	18 8
 for auxiliary contacts 	20 14
Safety related data	
product function	
 mirror contact according to IEC 60947-4-1 	Yes
 positively driven operation according to IEC 60947-5-1 	No
suitable for safety function	Yes
suitability for use safety-related switching OFF	Yes
service life maximum	20 a
test wear-related service life necessary	Yes
proportion of dangerous failures	
 with low demand rate according to SN 31920 	40 %
 with high demand rate according to SN 31920 	73 %
B10 value with high demand rate according to SN 31920	1 000 000
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
ISO 13849	
device type according to ISO 13849-1	3
overdimensioning according to ISO 13849-2 necessary	Yes
IEC 61508	
safety device type according to IEC 61508-2	Type A
Electrical Safety	
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
Approvals Certificates	
Conord Draduct Approval	

General Product Approval

Confirmation









<u>KC</u>

General Product Approval

EMV

Functional Saftey

Test Certificates

Marine / Shipping





Type Examination Certificate

Special Test Certificate

Type Test Certificates/Test Report



Marine / Shipping



Confirmation



Confirmation







Miscellaneous

other

other

Special Test Certificate

Railway

Environment

Environmental Confirmations

Further information

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=3RT2027-2AF00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2027-2AF00

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-2AF00

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

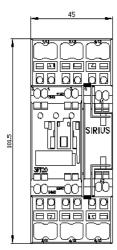
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2027-2AF00&lang=en

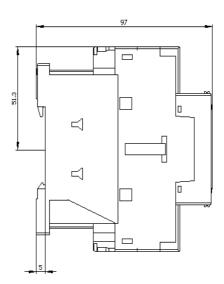
Characteristic: Tripping characteristics, I2t, Let-through current

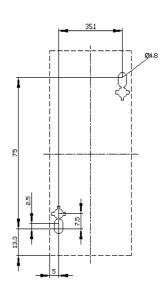
https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-2AF00/char

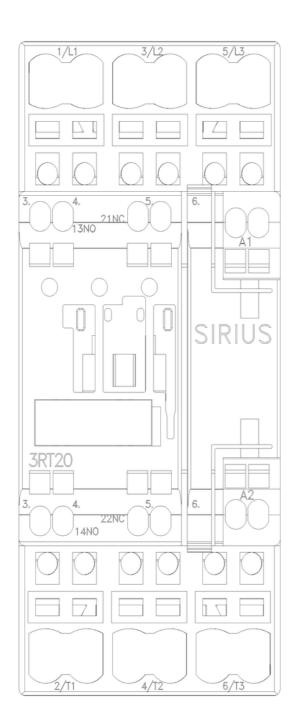
Further characteristics (e.g. electrical endurance, switching frequency)

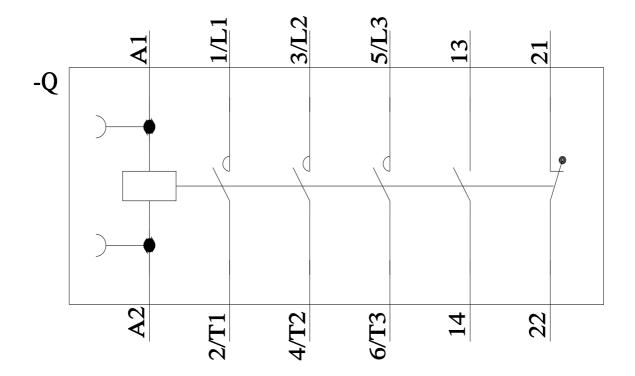
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2027-2AF00&objecttype=14&gridview=view1











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