SIEMENS

Data sheet 3RT2037-3AF04



power contactor, AC-3e/AC-3, 65 A, 30 kW / 400 V, 3-pole, 110 V AC, 50 Hz, auxiliary contacts: 2 NO + 2 NC, main circuit: screw terminal, control and auxiliary circuit: spring-loaded terminal, size: S2, removable auxiliary switch

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S2
product extension	
 function module for communication 	No
auxiliary switch	No
power loss [W] for rated value of the current	
 at AC in hot operating state 	11.4 W
 at AC in hot operating state per pole 	3.8 W
without load current share typical	6 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	9.8g / 5 ms, 6.5g / 10 ms
shock resistance with sine pulse	
• at AC	15.3g / 5 ms, 10.1g / 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)	10/01/2014
Weight	1.072 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	236 kg
global warming potential [CO2 eq] during manufacturing	4.11 kg
global warming potential [CO2 eq] during operation	233 kg
global warming potential [CO2 eq] after end of life	-0.635 kg
Main circuit	0.000 %
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 at AC-1	80 A
— up to 690 V at ambient temperature 40 $^{\circ}\text{C}$ rated value	80 A
— up to 690 V at ambient temperature 60 $^{\circ}\text{C}$ rated value	70 A
• at AC-3	
— at 400 V rated value	65 A
— at 500 V rated value	65 A
— at 690 V rated value• at AC-3e	47 A
— at 400 V rated value	65 A
— at 500 V rated value	65 A
— at 690 V rated value	47 A
• at AC-4 at 400 V rated value	55 A
• at AC-5a up to 690 V rated value	70.4 A
• at AC-5b up to 400 V rated value	53.9 A
• at AC-6a	
— up to 230 V for current peak value n=20 rated value	56.9 A
— up to 400 V for current peak value n=20 rated value	56.9 A
 up to 500 V for current peak value n=20 rated value 	56.9 A
— up to 690 V for current peak value n=20 rated value• at AC-6a	47 A
— up to 230 V for current peak value n=30 rated value	38 A
— up to 400 V for current peak value n=30 rated value	38 A
— up to 500 V for current peak value n=30 rated value	38 A
— up to 690 V for current peak value n=30 rated value	38 A
minimum cross-section in main circuit at maximum AC-1 rated value	25 mm²
operational current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	28 A
at 690 V rated value	22 A
operational current	
at 1 current path at DC-1	
— at 24 V rated value	55 A
— at 60 V rated value	23 A
— at 110 V rated value	4.5 A
— at 220 V rated value	1 A
— 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	55 A
— at 60 V rated value	45 A
— at 110 V rated value	45 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 24 V rated value	55 A
— at 60 V rated value	55 A
— at 110 V rated value	55 A
— at 220 V rated value	45 A
— at 440 V rated value	2.9 A
— at 600 V rated value	1.4 A
• at 1 current path at DC-3 at DC-5	LTA
— at 24 V rated value	35 A
— at 60 V rated value	6 A
— at 220 V rated value	1A
— at 440 V rated value	0.1 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	55 A
— at 60 V rated value	45 A
— at 110 V rated value	25 A
— at 220 V rated value	5 A
— at 440 V rated value	0.27 A
— at 600 V rated value	0.16 A
with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value	55 A
— at 60 V rated value	55 A
— at 110 V rated value	55 A
— at 220 V rated value	25 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.35 A
operating power	
at AC-2 at 400 V rated value	30 kW
• at AC-3	
— at 230 V rated value	18.5 kW
— at 400 V rated value	30 kW
— at 500 V rated value	37 kW
— at 690 V rated value	37 kW
• at AC-3e	
— at 230 V rated value	18.5 kW
— at 400 V rated value	30 kW
— at 500 V rated value	37 kW
— at 690 V rated value	37 kW
operating power for approx. 200000 operating cycles at AC-	
at 400 V rated value	14.7 kW
at 400 V rated value at 690 V rated value	20 kW
operating apparent power at AC-6a	
up to 230 V for current peak value n=20 rated value	22.6 kVA
up to 400 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value	39.4 kVA
up to 500 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value	49.2 kVA
up to 690 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value	56.1 kVA
operating apparent power at AC-6a	
up to 230 V for current peak value n=30 rated value	15.1 kVA
• up to 400 V for current peak value n=30 rated value	26.2 kVA
• up to 500 V for current peak value n=30 rated value	32.8 kVA
• up to 690 V for current peak value n=30 rated value	45.3 kVA
short-time withstand current in cold operating state up to 40 °C	
 limited to 1 s switching at zero current maximum 	1 055 A; Use minimum cross-section acc. to AC-1 rated value
limited to 5 s switching at zero current maximum	730 A; Use minimum cross-section acc. to AC-1 rated value
limited to 10 s switching at zero current maximum	520 A; Use minimum cross-section acc. to AC-1 rated value
limited to 30 s switching at zero current maximum	336 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 60 s switching at zero current maximum 	272 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	

• at AC	5 000 1/h
operating frequency	
at AC-1 maximum	800 1/h
• at AC-2 maximum	400 1/h
• at AC-3 maximum	700 1/h
at AC-3e maximum	700 1/h
• at AC-4 maximum	200 1/h
Control circuit/ Control	200 1/11
	AC
type of voltage of the control supply voltage control supply voltage at AC	AC
at 50 Hz rated value	110 V
	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	190 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.72
apparent holding power of magnet coil at AC	
• at 50 Hz	16 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.37
closing delay	
• at AC	10 80 ms
opening delay	10 111 00 1110
• at AC	10 18 ms
arcing time	10 20 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	Standard / 17 / 12
number of NC contacts for auxiliary contacts instantaneous	2
contact	
number of NO contacts for auxiliary contacts instantaneous	2
contact operational current at AC-12 maximum	10 A
operational current at AC-15	IVA
• at 230 V rated value	6 A
at 400 V rated value	3 A
at 500 V rated value at 500 V rated value	2 A
at 690 V rated value	1A
operational current at DC-12	10
	10 Δ
• at 24 V rated value	10 A
at 24 V rated valueat 48 V rated value	6 A
at 24 V rated valueat 48 V rated valueat 60 V rated value	6 A 6 A
 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value 	6 A 6 A 3 A
 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value 	6 A 6 A 3 A 2 A
 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value 	6 A 6 A 3 A 2 A 1 A
 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value 	6 A 6 A 3 A 2 A
 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value 	6 A 6 A 3 A 2 A 1 A 0.15 A
 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value operational current at DC-13 at 24 V rated value 	6 A 6 A 3 A 2 A 1 A 0.15 A
 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value operational current at DC-13 at 24 V rated value at 48 V rated value 	6 A 6 A 3 A 2 A 1 A 0.15 A
 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value operational current at DC-13 at 24 V rated value at 48 V rated value at 60 V rated value 	6 A 6 A 3 A 2 A 1 A 0.15 A
 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 600 V rated value operational current at DC-13 at 24 V rated value at 48 V rated value at 60 V rated value at 60 V rated value at 110 V rated value 	6 A 6 A 3 A 2 A 1 A 0.15 A
 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value operational current at DC-13 at 24 V rated value at 48 V rated value at 60 V rated value at 60 V rated value at 110 V rated value at 115 V rated value 	6 A 6 A 3 A 2 A 1 A 0.15 A 6 A 2 A 2 A 1 A 0.9 A
 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value operational current at DC-13 at 24 V rated value at 48 V rated value at 60 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 125 V rated value at 125 V rated value at 220 V rated value 	6 A 6 A 3 A 2 A 1 A 0.15 A 6 A 2 A 2 A 1 A 0.9 A 0.3 A
 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value operational current at DC-13 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value 	6 A 6 A 3 A 2 A 1 A 0.15 A 6 A 2 A 2 A 1 A 0.9 A 0.3 A 0.1 A
 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value operational current at DC-13 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value oat 600 V rated value at 600 V rated value at 600 V rated value 	6 A 6 A 3 A 2 A 1 A 0.15 A 6 A 2 A 2 A 1 A 0.9 A 0.3 A
 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 600 V rated value operational current at DC-13 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 600 V rated value contact reliability of auxiliary contacts UL/CSA ratings	6 A 6 A 3 A 2 A 1 A 0.15 A 6 A 2 A 2 A 1 A 0.9 A 0.3 A 0.1 A
 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value operational current at DC-13 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value 	6 A 6 A 3 A 2 A 1 A 0.15 A 6 A 2 A 2 A 1 A 0.9 A 0.3 A 0.1 A 1 faulty switching per 100 million (17 V, 1 mA)
 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value operational current at DC-13 at 24 V rated value at 48 V rated value at 60 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 125 V rated value at 220 V rated value at 220 V rated value at 600 V rated value 	6 A 6 A 3 A 2 A 1 A 0.15 A 6 A 2 A 2 A 1 A 0.9 A 0.3 A 0.1 A 1 faulty switching per 100 million (17 V, 1 mA)
 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value operational current at DC-13 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value 	6 A 6 A 3 A 2 A 1 A 0.15 A 6 A 2 A 2 A 1 A 0.9 A 0.3 A 0.1 A 1 faulty switching per 100 million (17 V, 1 mA)

- at 110 120 V rated value	for single-phase AC motor	
- of 279 hase AC motor - at 200208 V rated value - at 200208 V rated value - at 200208 V rated value - at 400404 V rated value - at 400404 V rated value - at 579500 V rated v		5 hp
• (or 3-phase AC motor) — at 2020230 V rated value — at 2020230 V rated value — at 460480 V rated value — at 507050 V rated value — 50 hp Short-crust processor design of the ninisture cross breaker for short-circust protection of the auxiliary contacts according to UL. Short-crust processor design of the fuse link — with hpe of coordination 1 required — with hpe of assignment 2 required — with hpe of assignment 2 required — with or short-circust procedion of the main circuit — with hpe of assignment 2 required — with original for a size of the auxiliary auxil		
		ТОПР
	•	20 hn
at 400480 V redu value 50 hp contact rating of auxiliary contacts according to UL A800 / 0000 Stinder-Cerult protection design of the ministrue circuit protection of the auxiliary corticut protection of the auxiliary circuit protection of the auxiliary switch required with per of coordination 1 required — with type of assignment 2 required — with type of assignment 2 required — with type of coordination of the auxiliary switch required trastation mounting of minimations mounting position 4-f-180* rotation possible on vertical mounting surface; can be tilted floward and backword by x-f-2.5° on vertical mounting surface; can be tilted floward and backword by x-f-2.5° on vertical mounting surface; can be tilted floward and backword by x-f-2.5° on vertical mounting surface; can be tilted floward and backword by x-f-2.5° on vertical mounting surface; can be tilted floward and backword by x-f-2.5° on vertical mounting surface; can be tilted floward and backword by x-f-2.5° on vertical mounting surface; can be tilted floward and backword by x-f-2.5° on vertical mounting surface; can be tilted floward and backword by x-f-2.5° on vertical mounting surface; can be tilted floward and backword by x-f-2.5° on vertical mounting surface; can be tilted floward and backword by x-f-2.5° on vertical mounting surface; can be tilted floward and backword by x-f-2.5° on vertical mounting surface; can be tilted floward and backword by x-f-2.5° on vertical mounting surface; can be tilted floward and backword by x-f-2.5° on vertical mounting surface; can be tilted floward and backword by x-f-2.5° on vertical mounting surface; can be tilted floward and backword by x-f-2.5° on vertical mounting surface; can be tilted floward and backword by x-f-2.5° on vertical mounting surface; can be tilted floward floward floward by x-f-2.5° on vertical mounting surface		
— at 575/600 V related value contact rating of auxiliary contacts according to UL Short-circuit protection design of the rimitature circuit breaker for short-circuit protection of the auxiliary circuit pt 2024 V design of the fuse link - of short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required — with type of decircuit protection of the auxiliary switch required Installation/mounting/ dimensions — mounting position — stateming method — streaming method — ownwards		·
Context rating of auxillary contacts according to U. A600 / Q800		·
Short-circuit protection design of the ministure direct breaker for short-circuit protection of the auxiliary protection of the auxiliary switch required which type of coordination 1 required of the function of the auxiliary switch required flastening method side-by-side mounting flastening method side-by-side mounting flastening method of the function		
design of the ministure creciul breaker for short-circult protection of the auxiliary criterial tip to 230 / 1		A0007 Q000
design of the fuse link • for short-circuit protection of the main circuit — with type of assignment 2 required — with side-by-side mounting Fastening method side-by-side mounting — serve and snap-on mounting onto 35 mm DIN rail according to DIN EN 80715 — height — the side — downwards — upwards — downwards — of orgrounded parts — for grounded parts — for grounded parts — for wards — downwards — downwards — downwards — of the side — downwards — of the side — downwards — of the side — downwards — of the parts — for type att — for twards — ownwards — of the side — downwards — of the side — of man and the side — of the side — of man and the s		C characteristic: 10 A; 0.4 kA
• for short-circuit protection of the main circuit — with type of coordination 1 required ### with type of assignment 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required for storing position	of the auxiliary circuit up to 230 V	
- with type of assignment 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required mounting position fastening method side-by-side mounting fastening method side-by-side mounting fastening method side-by-side mounting fastening method fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 height 114 mm vidth 55 mm depth 10 mm - forwards - upwards - downwards - at the side - downwards - of ror grounded parts - forwards - forwards - forwards - forwards - for main current circuit - for main contacts - for MVC cables for main contacts - finely stranded with core end processing - finely stranded with core end process	 for short-circuit protection of the main circuit 	
For short-circuit protection of the auxiliary switch required mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backwar	 — with type of coordination 1 required 	
mounting position	 — with type of assignment 2 required 	gG: 125A (690V,100kA), aM: 63A (690V,100kA), BS88: 100A (415V,80kA)
mounting position # 1-f 180* rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on vertical mounting surface; can be tilted forward and backward by +/- 22.5* on wn DIN rall according to DIN EN 60715 ### 14 mm ### 14 mm ### 14 mm ### width ### 55 mm ### 10 mm ### 0 mm	for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)
fastening method side-by-side mounting fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 80715 height width 55 mm depth required spacing with side-by-side mounting — forwards — upwards — downwards — at the side — for grounded parts — forwards — upwards — at the side — downwards — at the side — downwards — at the side — downwards — 10 mm — at the side — downwards — 10 mm — ior live parts — for live parts — forwards — upwards — at the side — downwards — 10 mm — ior live parts — forwards — upwards — at the side — downwards — 10 mm — for main contacts — at the side — downwards — at the side — downwards — side — in live parts — at the side — of main current circuit — at the side — of main current circuit — ior auxiliary and control circuit — ior auxiliary and control circuit — ior main current circuit — of main current circuit — ior main current circuit — ior main current — for main contacts — solid or stranded — finely stranded with core end processing — finely stranded with core end processing connectable conductor cross-section for main contacts — solid or stranded — finely stranded with core end processing — finely stranded wi	Installation/ mounting/ dimensions	
fasterling method Delight	mounting position	
height width 55 mm dopth 178 mm required spacing • with side-by-side mounting — forwards 10 mm — upwards 10 mm — at the side 0 mm — upwards 10 mm — at the side 6 mm — upwards 10 mm — at the side 6 mm — upwards 10 mm — at the side 6 mm — downwards 10 mm — at the side 6 mm — downwards 10 mm — at the side 6 mm — forwards 10 mm — to five parts 10 mm — upwards 10 mm — upwards 10 mm — upwards 10 mm — of or incomparts 10 mm — of or incomparts 10 mm — at the side 6 mm Connections/ Terminals type of electrical connection • for main current circuit screw-type terminals spring-loaded terminals • of main current circuit spring-loaded terminals • of magnet coil Spring-type terminals • of magnet coil Spring-type terminals • for main contacts Spring-type terminals • for main contacts Spring-type terminals • for main contacts (2x (1 35 mm²), 1x (1 35 mm²) • (x (1 25 mm	fastening method side-by-side mounting	Yes
width depth 178 mm required spacing • with side-by-side mounting — forwards 10 mm — downwards 10 mm — at the side • for grounded parts — forwards 10 mm — upwards 10 mm — upwards 10 mm — at the side • for grounded parts — forwards 10 mm — upwards 10 mm — at the side — downwards 10 mm — at the side — downwards 10 mm — townwards 10 mm • for live parts — forwards 10 mm — upwards 10 mm — upwards 10 mm — upwards 10 mm — odownwards 10 mm — odownwards 10 mm — odownwards 10 mm — at the side 6 mm Connections/ Ferminals type of electrical connection • for main current circuit spring-loaded terminals • of or auxiliary and control circuit spring-loaded terminals • of magnet coil spring-type terminals • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts • finely stranded with core end processing	fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — 10 mm • for grounded parts — forwards — 10 mm — at the side • for grounded parts — upwards — 10 mm — upwards — at the side — downwards 10 mm — downwards • for live parts — forwards • for live parts — forwards — upwards — upwards — upwards — upwards — the side — downwards • for live parts — forwards — upwards — upwards — upwards — upwards — upwards — upwards — the side — for an unumards — the side Connections/Terminals Type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • at contactor for auxiliary contacts • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts • finely stranded with core end processing	height	114 mm
required spacing • with side-by-side mounting — forwards — upwards — downwards — 10 mm — downwards — 10 mm • for grounded parts — forwards — upwards — upwards — 10 mm — upwards — upwards — 10 mm — upwards — 10 mm — downwards — 10 mm — for live parts — forwards — upwards — upwards — upwards — 10 mm — downwards — 10 mm — downwards — 10 mm — downwards — the side — 6 mm Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • of or auxiliary and control circuit • of magnet coil type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts • finely stranded with core end processing	width	55 mm
with side-by-side mounting - forwards - upwards - downwards - at the side • for grounded parts - forwards - upwards - forwards - upwards - forwards - upwards - at the side - downwards - at the side - downwards - 10 mm - at the side - downwards - for live parts - forwards - for live parts - forwards - downwards - upwards - downwards - downwards - downwards - downwards - downwards - downwards - to mm Connections/ Torminals type of electrical connection • for ramain current circuit • for auxiliary and control circuit • of magnet coil type of connectable conductor cross-sections • for main cornates - solid or stranded - finely stranded with core end processing connectable conductor cross-section for main contacts • solid or stranded • finely stranded with core end processing	depth	178 mm
	required spacing	
- upwards	with side-by-side mounting	
- downwards - at the side • for grounded parts - forwards - upwards - upwards - at the side - downwards - downwards - for live parts - forwards - upwards - forwards - forwards - forwards - forwards - upwards - forwards - upwards - downwards - downwards - at the side - downwards - at the side - forwards - at the side - formain current circuit - for auxiliary and control circuit - for auxiliary and control circuit - at contactor for auxiliary contacts - of magnet coil type of connectable conductor cross-sections - for main contacts - solid or stranded - finely stranded with core end processing - for AWG cables for main contacts - 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 - 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 - 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 - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - solid	— forwards	10 mm
- at the side • for grounded parts - forwards - upwards - at the side - downwards • for live parts - forwards - upwards • for live parts - forwards - upwards - forwards - upwards - forwards - upwards - upwards - upwards - upwards - downwards - downwards - at the side - downwards - at the side - forman current circuit • for auxiliary and control circuit • for auxiliary and control circuit • for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main current circuit - solid or stranded - finely stranded with core end processing • for AWG cables for main contacts • solid or stranded • finely stranded with core end processing • finely stranded withcore end processing • finely stranded with core end processing • finely stranded with core end processing • finely stranded withcore end processing • finely stranded with core end processing • finely stranded with core end processing	— upwards	10 mm
• for grounded parts — forwards — upwards — at the side — downwards • for live parts — forwards — upwards • for live parts — forwards — upwards — odownwards — at the side • formain current circuit • for awillary and control circuit • for awillary and control circuit • at contactor for auxilliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • finely stranded without core end processing	— downwards	10 mm
- forwards 10 mm 1	— at the side	0 mm
- forwards 10 mm 1	for grounded parts	
- at the side	— forwards	10 mm
- at the side	— 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 and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • finely stranded with core end processing	·	6 mm
• for live parts — forwards — upwards — downwards — at the side Connections/ Terminals type of electrical connection • for main current circuit • at contactor for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • finely stranded with core end processing	— downwards	10 mm
- 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 spring-loaded terminals • at contactor for auxiliary contacts • of magnet coil Spring-type terminals type of connectable conductor cross-sections • for main contacts - solid or stranded - finely stranded with core end processing connectable conductor cross-section for main contacts • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • finely stranded with core end processing • finely stranded without core end processing		
- upwards - downwards - at the side Connections/ Terminals type of electrical connection	·	10 mm
- 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 or stranded - finely stranded with core end processing • finely stranded without core end processing		
- at the side 6 mm Connections/ Terminals type of electrical connection • for main current circuit spring-loaded terminals • at contactor for auxiliary contacts Spring-type terminals • of magnet coil Spring-type terminals type of connectable conductor cross-sections • for main contacts — solid or stranded 2x (1 35 mm²), 1x (1 50 mm²) — finely stranded with core end processing 2x (18 2), 1x (18 1) connectable conductor cross-section for auxiliary contacts • finely stranded with core end processing 0.5 2.5 mm² • finely stranded with core end processing 0.5 2.5 mm² type of connectable conductor cross-sections	·	
type of electrical connection • for main current circuit • at contactor for auxiliary contacts • of main contects • of magnet coil type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • 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		
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 or stranded — finely stranded with core end processing • finely stranded without core end processing • finely connectable conductor cross-sections	33 33 3 3 3	V IIIII
• for main current circuit • for auxiliary and control circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil **Spring-type terminals • of magnet coil **Spring-type terminals **Spring-type ter		
• for auxiliary and control circuit • at contactor for auxiliary contacts • at contactor for auxiliary contacts • of magnet coil **Spring-type terminals** **Spr		screw-type terminals
 at contactor for auxiliary contacts of magnet coil Spring-type terminals type of connectable conductor cross-sections for main contacts — solid or stranded — finely stranded with core end processing for AWG cables for main contacts of onectable conductor cross-section for main contacts finely stranded with core end processing 1 35 mm² connectable conductor cross-section for auxiliary contacts finely stranded with core end processing solid or stranded finely stranded with core end processing o.5 2.5 mm² finely stranded without core end processing 0.5 2.5 mm² finely stranded without core end processing 0.5 2.5 mm² type of connectable conductor cross-sections 		
 of magnet coil type of connectable conductor cross-sections for main contacts — solid or stranded — finely stranded with core end processing for AWG cables for main contacts finely stranded with core end processing solid or stranded finely stranded with core end processing finely stranded without core end processing finely stranded conductor cross-sections 	•	
type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts • finely stranded with core end processing 2x (1 25 mm²), 1x (1 35 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 2x (18 2), 1x (18 1) connectable conductor cross-section for main contacts • finely stranded with core end processing 1 35 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 • finely connectable conductor cross-sections	•	
 for main contacts — solid or stranded — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts • finely stranded with core end processing • finely stranded with core end processing • solid or stranded • 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 stranded conductor cross-sections 		
- solid or stranded - finely stranded with core end processing of or AWG cables for main contacts of finely stranded with core end processing of finely stranded with core end processing tonnectable conductor cross-section for main contacts of finely stranded with core end processing tonnectable conductor cross-section for auxiliary contacts of solid or stranded of finely stranded with core end processing of finely stranded with core end processing of finely stranded without core end processing of finely stranded without core end processing of finely stranded conductor cross-sections		
 — finely stranded with core end processing ● for AWG cables for main contacts ②x (1 25 mm²), 1x (1 35 mm²) ②x (18 2), 1x (18 1) connectable conductor cross-section for main contacts ● finely stranded with core end processing ①5 35 mm² Connectable conductor cross-section for auxiliary contacts ● solid or stranded ①5 2.5 mm² ● finely stranded with core end processing ● finely stranded without core end processing ①5 2.5 mm² U.5 2.5 mm² U.5 2.5 mm² U.5 2.5 mm² 		2x (1 35 mm²). 1x (1 50 mm²)
 for AWG cables for main contacts connectable conductor cross-section for main contacts finely stranded with 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 type of connectable conductor cross-sections 		
connectable conductor cross-section for main contacts • finely stranded with 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 1 35 mm² 0.5 2.5 mm² 0.5 2.5 mm² 1 35 mm²		
 ◆ finely stranded with 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 type of connectable conductor cross-sections 1 35 mm² 0.5 2.5 mm² 0.5 2.5 mm² 0.5 2.5 mm²		(10 iii =), 1A(10 iii 1)
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		1 35 mm²
 solid or stranded finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing 2.5 mm² type of connectable conductor cross-sections 	i	1 VO AIII
 finely stranded with core end processing finely stranded without core end processing type of connectable conductor cross-sections 0.5 1.5 mm² 0.5 2.5 mm²	-	0.5 2.5 mm ²
• finely stranded without core end processing 0.5 2.5 mm² type of connectable conductor cross-sections		
type of connectable conductor cross-sections		
		U.U 2.0 IIIIII

— 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 1
 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	
General Product Approval	

General Product Approval





Confirmation





<u>KC</u>

General Product Approval

EMV

Test Certificates

Marine / Shipping





Special Test Certificate

Type Test Certificates/Test Report





Marine / Shipping





(





Confirmation

other

other Railway

Dangerous goods

Environment

Confirmation

Special Test Certificate

Transport Information



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=3RT2037-3AF04

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2037-3AF04

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2037-3AF04

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

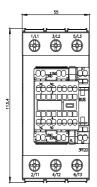
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2037-3AF04&lang=en

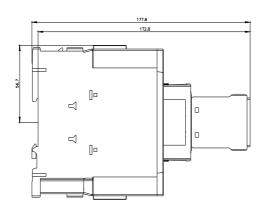
Characteristic: Tripping characteristics, I2t, Let-through current

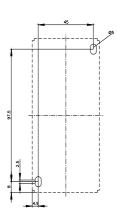
https://support.industry.siemens.com/cs/ww/en/ps/3RT2037-3AF04/char

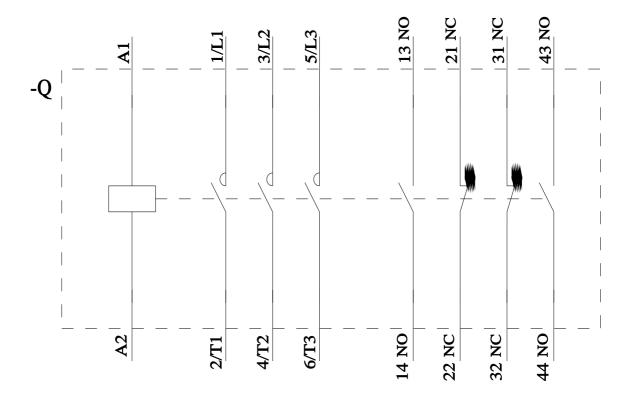
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2037-3AF04&objecttype=14&gridview=view1









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