SIEMENS

Data sheet 3RT2047-3AP00



power contactor, AC-3e/AC-3, 110 A, 55 kW / 400 V, 3-pole, 230 V AC, 50 Hz, auxiliary contacts: 1 NO + 1 NC, main circuit: screw terminal, control and auxiliary circuit: spring-loaded terminal, size: S3 $\,$

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
Seneral technical data	
size of contactor	S3
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 	23.7 W
 at AC in hot operating state per pole 	7.9 W
 without load current share typical 	7.3 W
type of calculation of power loss depending on pole	quadratic
insulation voltage	
 of main circuit with degree of pollution 3 rated value 	1 000 V
 of auxiliary circuit with degree of pollution 3 rated value 	690 V
surge voltage resistance	
of main circuit rated value	8 kV
 of auxiliary circuit rated value 	6 kV
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	690 V
shock resistance at rectangular impulse	
• at AC	10.3g / 5 ms, 6,.g / 10 ms
shock resistance with sine pulse	
• at AC	16.3g / 5 ms, 10.g / 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	1.729 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	405 kg
Global Warming Potential [CO2 eq] during manufacturing	7.66 kg
Global Warming Potential [CO2 eq] during operation	399 kg
Global Warming Potential [CO2 eq] after end of life	-1.19 kg
Main circuit	-1.19 kg
	2
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	1 000 V
at AC-3 rated value maximum	
at AC-3e rated value maximum	1 000 V
operational current	400 A
 at AC-1 at 400 V at ambient temperature 40 °C rated value 	130 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated	130 A
value	
 up to 690 V at ambient temperature 60 °C rated 	110 A
value	
• at AC-3	
— at 400 V rated value	110 A
— at 500 V rated value	110 A
— at 690 V rated value	98 A
— at 1000 V rated value	30 A
• at AC-3e	440.4
— at 400 V rated value	110 A
— at 500 V rated value	110 A
— at 690 V rated value	98 A
— at 1000 V rated value	30 A
• at AC-4 at 400 V rated value	97 A
at AC-5a up to 690 V rated value	120 A
at AC-5b up to 400 V rated value	110 A
• at AC-6a	00.4
— up to 230 V for current peak value n=20 rated value	98 A
— up to 400 V for current peak value n=20 rated value	98 A
— up to 500 V for current peak value n=20 rated value	98 A
— up to 690 V for current peak value n=20 rated value	98 A
• at AC-6a	CF 2 A
— up to 230 V for current peak value n=30 rated value	65.3 A
 up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value 	65.3 A 65.3 A
up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value	65.3 A
minimum cross-section in main circuit at maximum AC-1 rated value	50 mm ²
operational current for approx. 200000 operating cycles at	
AC-4	
at 400 V rated value	46 A
at 690 V rated value	36 A
operational current	
at 1 current path at DC-1	
— at 24 V rated value	100 A
— at 60 V rated value	60 A
— at 110 V rated value	9 A
— at 220 V rated value	2 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.4 A
 with 2 current paths in series at DC-1 	
— at 24 V rated value	100 A
— at 60 V rated value	100 A
— at 110 V rated value	100 A
 at 220 V rated value 	10 A

— at 440 V rated value	1.8 A
— at 440 V rated value — at 600 V rated value	1.0 A
with 3 current paths in series at DC-1	
— at 24 V rated value	100 A
— at 60 V rated value	100 A
— at 100 V rated value — at 110 V rated value	100 A
— at 220 V rated value	80 A
— at 440 V rated value	4.5 A
— at 600 V rated value	2.6 A
• at 1 current path at DC-3 at DC-5	2.0 A
— at 24 V rated value	40 A
— at 60 V rated value	6 A
— at 110 V rated value	2.5 A
— at 220 V rated value	1A
— at 440 V rated value	0.15 A
— at 600 V rated value	0.06 A
with 2 current paths in series at DC-3 at DC-5	0.00 A
— at 24 V rated value	100 A
— at 60 V rated value	100 A
— at 110 V rated value	100 A
— at 220 V rated value	7 A
— at 440 V rated value	0.42 A
— at 600 V rated value	0.16 A
with 3 current paths in series at DC-3 at DC-5	0.1071
— at 24 V rated value	100 A
— at 60 V rated value	100 A
— at 110 V rated value	100 A
— at 220 V rated value	35 A
— at 440 V rated value	0.8 A
— at 600 V rated value	0.35 A
operating power	0.0071
at AC-2 at 400 V rated value	55 kW
• at AC-3	
— at 230 V rated value	30 kW
— at 400 V rated value	55 kW
— at 500 V rated value	75 kW
— at 690 V rated value	90 kW
— at 1000 V rated value	37 kW
• at AC-3e	
— at 230 V rated value	30 kW
— at 400 V rated value	55 kW
— at 500 V rated value	75 kW
— at 690 V rated value	90 kW
— at 1000 V rated value	37 kW
operating power for approx. 200000 operating cycles at AC-	
4	
at 400 V rated value	24.3 kW
at 690 V rated value	32.9 kW
operating apparent power at AC-6a	
up to 230 V for current peak value n=20 rated value	39 kVA
• up to 400 V for current peak value n=20 rated value	67 kVA
up to 500 V for current peak value n=20 rated value	84 kVA
up to 690 V for current peak value n=20 rated value	117 kVA
operating apparent power at AC-6a	00 14/4
up to 230 V for current peak value n=30 rated value	26 kVA
up to 400 V for current peak value n=30 rated value	45.2 kVA
up to 500 V for current peak value n=30 rated value	56.5 kVA
up to 690 V for current peak value n=30 rated value about time withough a current in cold apprehing state up to	78 kVA
short-time withstand current in cold operating state up to 40 °C	
limited to 1 s switching at zero current maximum	1 960 A; Use minimum cross-section acc. to AC-1 rated value

 limited to 5 s switching at zero current maximum 	1 502 A; Use minimum cross-section acc. to AC-1 rated value
limited to 0 5 switching at zero current maximum	1 095 A; Use minimum cross-section acc. to AC-1 rated value
limited to 30 s switching at zero current maximum	707 A; Use minimum cross-section acc. to AC-1 rated value
limited to 60 s switching at zero current maximum	562 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	302 A, USE MIMITUM Cross-section acc. to AC-11 ateu value
at AC	5 000 1/h
	3 000 1/11
operating frequency	900 1/h
• at AC-2 maximum	350 1/h
at AC-2 maximum at AC-3 maximum	850 1/h
	850 1/h
at AC-3e maximumat AC-4 maximum	200 1/h
Control circuit/ Control	200 1/11
	10
type of voltage of the control supply voltage	AC
control supply voltage at AC	2001
at 50 Hz rated value	230 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	20014
• at 50 Hz	296 VA
inductive power factor with closing power of the coil • at 50 Hz	0.61
apparent holding power of magnet coil at AC	
• at 50 Hz	19 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.38
closing delay	
• at AC	13 50 ms
opening delay	
• at AC	10 21 ms
arcing time	10 20 ms
arong anie	
control version of the switch operating mechanism	Standard A1 - A2
	Standard A1 - A2
control version of the switch operating mechanism	Standard A1 - A2
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous	
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous	1
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact	1
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum	1
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15	1 1 10 A
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value	1 1 10 A 6 A
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value	1 1 10 A 6 A 3 A
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value	1 1 10 A 6 A 3 A 2 A
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value	1 1 10 A 6 A 3 A 2 A
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12	1 1 10 A 6 A 3 A 2 A 1 A
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value	1 1 10 A 6 A 3 A 2 A 1 A
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value	1 1 10 A 6 A 3 A 2 A 1 A 10 A 6 A
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 60 V rated value	1 1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • 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	1 1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 3 A
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • 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 110 V rated value • at 125 V rated value	1 1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 3 A 2 A
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • 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 220 V rated value	1 1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 3 A 2 A 1 A
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • 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 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value	1 1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 3 A 2 A 1 A
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • 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 220 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value	1 1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 7 A 7 A 7 A 7 A 7 A 7 A 7 A 7 A 7 A 7
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 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 24 V rated value	1 1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 24 V rated value • at 25 V rated value • at 27 V rated value • at 28 V rated value • at 29 V rated value • at 20 V rated value • at 24 V rated value • at 48 V rated value	1 1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 24 V rated value • at 24 V rated value • at 24 V rated value • at 600 V rated value	1 1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 600 V rated value • at 220 V rated value • at 600 V rated value • at 110 V rated value	1 1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 2 A 1 A 0.9 A
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 24 V rated value • at 600 V rated value • at 110 V rated value • at 125 V rated value • at 120 V rated value	1 1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 2 A 1 A 0.9 A 0.3 A
control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 600 V rated value • at 220 V rated value • at 600 V rated value • at 110 V rated value	1 1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 7 A 7 A 10 A 7 A 7 A 7 A 7 A 7 A 7 A 7 A 7 A 7 A 7

full-load current (FLA) for 3-phase AC motor a 14 80 V rated value yielded mechanical performance (hp) - of rating-light act of value - at 1101/20 V rated value - at 2002 V rated value - at 379600 V rated value - at 40 Pp - at 679600 V rated value - with pipe of conditions of the fuse link - for short-circuit protection of the main circuit - with type of conditation 1 required - for short-circuit protection of the main circuit - with type of sesignment 2 required - for short-circuit protection of the auxiliary workshir required - for short-circuit protection of the auxiliary workshir required - for short-circuit protection of the auxiliary workshir required - for short-circuit protection of the auxiliary workshir required - for short-circuit protection of the auxiliary workshir required - for short-circuit protection of the auxiliary workshir required - for short-circuit protection of the auxiliary workshir required - for short-circuit protection of the auxiliary workshir required - for short-circuit protection - for short sh	UL/CSA ratings	
### 480 V rited value		
# 160 OV rised value		96 A
violated mechanical performance (hp)		
at 1901/20 V rated value at 230 V rated value 4 200 pp 4 230 V rated value 4 200 pp 4 230 V rated value 4 400 pp 4 200 pp 4		
- in 230 V raled value • for 3-phase AC motor - at 200:208 V rated value - at 200:208 V rated value - at 400:208 V rated value - at 400:208 V rated value - at 400:208 V rated value - at 575:000 V rated value - with type of condination i required - with type of coordination i required - with type of assignment 2 required - victoricarios protection of the auxiliary switch required - victoricarios protection of victoricarios protection of victoricarios protection of victoricarios protection - victoricarios protection of victoricarios	• .	10 hp
		·
at 200208 V rated value at 460/480 V rated value 200 pm 400 pm 200 pm -		20 πρ
at 220/230 Y rated value	·	30 ha
		· ·
A600 / P600		
Short-circuit protection design of the fuse link		
design of the fuse link • for short-circuit protection of the main circuit —with type of coordination 1 required • for short-circuit protection of the main circuit —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 Installation/mounting/idimensions mounting possible fastening method fastenin		A600 / P600
• for short-circuit protection of the main circuit — with type of coordination 1 required — with type of coordination 1 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required Installation mounting dimensions 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 medical mounting surface; can be tilted forward and backward by +/- 22.5° on medical mounting surface; can be tilted forward and backward by +/- 22.5° on verti		
with type of coordination 1 required		
- with type of assignment 2 required	•	
Installation/mounting/dimensions mounting position fastening method fastening	 — with type of coordination 1 required 	kA)
mounting position #-1-180" 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 wertical mounting surface; can be tilted forward and backward by +/- 22.5" on wertical mounting surface; can be tilted forward and backward by +/- 22.5" on wertical mounting surface; can be tilted forward and backward by +/- 22.5" on wertical mounting surface; can be tilted forward and backward by +/- 22.5" on wertical mounting surface; can be tilted forward and backward by +/- 22.5" on wertical mounting surface; can be tilted forward and backward by +/- 22.5" on wertical mounting surface; can be tilted forward and backward by +/- 22.5" on wertical mounting surface; can be tilted forward and backward by +/- 22.5" on wertical mounting surface; can be tilted forward and backward by +/- 22.5" on wertical mounting surface; can be tilted forward and backward by +/- 22.5" on wertical mounting surface; can be tilted forward and backward by +/- 22.5" on wertical mounting surface; can be tilted forward and backward by +/- 22.5" on wertical mounting surface; can be tilted forward and surface; can be tilted forward and surface; can be tilted forward and sur		gG: 200A (690V,100kA), aM: 100A (690V,100kA), BS88: 160A (415V,80kA)
mounting position # 4-f80" rotation possible on vertical mounting surface; can be titled forward and beckward by #-f-22.6" on vertical mounting surface sorew and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 ## width	for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)
backward by ++ 22_6" on vertical mounting surface fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 height width 70 mm depth 70 mm feepth 70 mm i 52 mm required spacing with side-by-side mounting — forwards — upwards — upwards — downwards — 10 mm for grounded parts — forwards — upwards — upwards — 10 mm — at the side — 10 mm — downwards — 10 mm — at the side — 10 mm — downwards — 10 mm — odwnwards — 10 mm — of main contacts — at the side — 10 mm — odwnwards — 10 mm — odwnwards — 10 mm — odwnwards — 10 mm — of or main current circuit — for auxiliary and control circuit — of or auxiliary and control circuit — of or main current circuit — of or main current circuit — of main current circuit —	Installation/ mounting/ dimensions	
height width 70 mm depth 70 mm required spacing • with side-by-side mounting — forwards 20 mm — upwards 10 mm — downwards 10 mm — of forwards 20 mm — upwards 10 mm — of forwards 20 mm — upwards 10 mm — at the side 0 mm — at the side 10 mm — at the side 10 mm — at the side 10 mm — odownwards 10 mm — at the side 10 mm — of rilve parts — forwards 20 mm — upwards 10 mm — of rilve parts — forwards 20 mm — upwards 10 mm — of rilve parts — upwards 10 mm — of rilve parts — forwards 20 mm — upwards 10 mm — of or ilve parts — in the side 10 mm — of ormain current circuit 50 mm — of or main current circuit 50 mm — of ro main current circuit 50 mm — of magnet coli 50 mm — of magnet coli 50 mm — in the side 50 mm — in contacts 50 mm — in contacts 50 mm — in contacts 50 mm — in ornated 50 mm — in ornate	mounting position	
width 70 mm depth 152 mm required spacing • with side-by-side mounting • with side-by-side mounting 20 mm — forwards 20 mm — downwards 10 mm — at the side 0 mm — forwards 20 mm — upwards 10 mm — at the side 10 mm — downwards 20 mm — forwards 20 mm — upwards 10 mm — forwards 20 mm — upwards 10 mm — downwards 10 mm — at the side 10 mm Connections/ Torminals 10 mm — at the side 10 mm On an in current circuit screw-type terminals * for remain current circuit screw-type terminals • for auxiliary and control circuit spring-loaded terminals • of magnet coil Spring-type terminals • for main contacts Spring-type terminals • for main contacts 2x (2.5 35 mm²), 1x (2.5 50 mm²) • for main conta	fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
depth 152 mm	height	140 mm
required spacing with side-by-side mounting — forwards — upwards — downwards — at the side of grounded parts — forwards — upwards — upwards — to main current circuit of main current circuit of main current circuit of main current contacts — finely stranded with core end processing of main contacts — finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid • finely stranded • finely stranded 20 mm 10 mm	width	70 mm
with side-by-side mounting - forwards - upwards - downwards - at the side - for grounded parts - forwards - upwards - at the side - downwards - at the side - downwards - for live parts - forwards - upwards - upward	depth	152 mm
	required spacing	
- upwards - downwards - at the side • for grounded parts - forwards - upwards - upwards - upwards - upwards - at the side • for grounded parts - forwards - upwards - at the side - downwards - for live parts - forwards - upwards - the side - to mm - downwards - at the side - to mm - connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • for auxiliary and control circuit • for main current circuit • for main current conductor for auxiliary contacts • for main contacts - finely stranded with core end processing • for AWG cables for main contacts • solid • finely stranded with core end processing connectable conductor cross-section for main contacts • finely stranded • finely stranded • finely stranded • 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 • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded 0.5 2.5 mm²	with side-by-side mounting	
- downwards - at the side • for grounded parts - forwards - upwards - upwards - at the side - downwards - at the side - downwards - at the side - downwards - for live parts - forwards - upwards - for live parts - forwards - upwards - upwards - upwards - upwards - downwards - downwards - downwards - at the side - downwards - at the side - for main 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 - for AWG cables for main contacts - solid - stranded - finely stranded with core end processing - stranded - finely stranded with core end processing - stranded - finely stranded with core end processing - 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	— forwards	20 mm
- downwards - at the side • for grounded parts - forwards - upwards - at the side 10 mm - at the side - downwards - at the side - downwards • for live parts - forwards - upwards - forwards - forwards - upwards - forwards - upwards - the side - for main 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 - finely stranded with core end processing - for AWG cables for main contacts - solid - stranded - finely stranded with core end processing - stranded - finely stranded with core end processing - 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	— upwards	10 mm
- at the side • for grounded parts - forwards - upwards - upwards - at the side - downwards • for live parts - forwards - upwards - the side 10 mm - downwards - at the side 10 mm - the side Connections/ Terminals type of electrical connection • 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 MWG cables for main contacts - finely stranded with core end processing • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded • finely stranded • finely stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • solid or stranded • finely stranded	·	10 mm
• for grounded parts — forwards — upwards — at the side — downwards — for live parts — forwards — upwards — upwards — upwards — upwards — upwards — upwards — downwards — downwards — to mm — at the side — to mm 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 — finely stranded with core end processing • for AWG cables for main contacts • solid • stranded • finely stranded with core end processing • for no mm² connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded		0 mm
forwards 20 mm upwards 10 mm at the side 10 mm downwards 10 mm for live parts forwards 20 mm upwards 10 mm downwards 10 mm downwards 10 mm downwards 10 mm at the side 10 mm at the side 10 mm at the side 10 mm downwards 10 mm at the side 50 mm	for grounded parts	
- upwards - at the side - downwards 10 mm • for live parts - forwards 20 mm - upwards 10 mm • for live parts - forwards 20 mm - upwards 10 mm - downwards 10 mm - downwards 10 mm - at the side 10 mm Connections/ Terminals type of electrical connection • for main 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 - finely stranded with core end processing • for AWG cables for main contacts • solid • stranded • finely stranded with core end processing • solid or stranded • finely stranded	-	20 mm
- at the side		
- downwards • for live parts - forwards - upwards - upwards - downwards - at the side - 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-sections • for AWG cables for main contacts - solid • for AWG cables for main contacts • 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 • solid or stranded • finely stranded of conductor cross-section for auxiliary contacts • solid or stranded • stranded • stranded • of connectable conductor cross-section for auxiliary contacts • solid or stranded	·	
• for live parts - forwards - upwards - upwards - downwards - at the side - the side - for main current circuit - for auxiliary and control circuit - at contactor for auxiliary contacts - of magnet coil - for main contacts - finely stranded with core end processing - solid - stranded - stranded - finely stranded with core end processing - finely stranded - stranded - stranded - solid - connectable conductor cross-section for auxiliary contacts - solid - stranded - stranded - stranded - solid - stranded		
forwards 20 mm upwards 10 mm downwards 10 mm at the side 10 mm Connections/ Terminals type of electrical connection • for main current circuit screw-type terminals • at contactor for auxiliary contacts • of magnet coil Spring-type terminals type of connectable conductor cross-sections • for main contacts finely stranded with core end processing 2x (2.5 35 mm²), 1x (2.5 50 mm²) • solid • stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • solid or stranded • finely stranded • finely stranded • finely stranded • finely stranded • 0.5 2.5 mm²		10 IIIIII
upwards downwards at the side for main current circuit for auxiliary and control circuit spring-loaded terminals at contactor for auxiliary contacts for magnet coil at contactable conductor cross-sections finely stranded with core end processing at contacts finely stranded with core end processing at contacts -	•	20
- at the side 10 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 Spring-type terminals • of magnet coil Spring-type terminals type of connectable conductor cross-sections • for main contacts — finely stranded with core end processing 2x (2.5 35 mm²), 1x (2.5 50 mm²) • for AWG cables for main contacts • solid 2.5 16 mm² • stranded 6 70 mm² • finely stranded with core end processing 2.5 50 mm² connectable conductor cross-section for auxiliary contacts • solid or stranded 0.5 2.5 mm²	·	
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 — finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • stranded • stranded • finely stranded with core end processing • solid or stranded		
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 — finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing 2.5 16 mm² 6 70 mm² 2.5 50 mm² connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • stranded • stranded • solid or stranded • solid or stranded • solid or stranded		10 mm
 for main current circuit for auxiliary and control circuit at contactor for auxiliary contacts of magnet coil Spring-type terminals of main contacts for main contacts for AWG cables for main contacts solid stranded stranded finely stranded with core end processing 2.5 16 mm² finely stranded with core end processing 2.5 50 mm² Connectable conductor cross-section for main contacts solid stranded finely stranded with core end processing 2.5 50 mm² Connectable conductor cross-section for auxiliary contacts solid or stranded solid or stranded 0.5 2.5 mm² Connectable conductor cross-section for auxiliary contacts solid or stranded 0.5 2.5 mm² 		
 for auxiliary and control circuit at contactor for auxiliary contacts of magnet coil Spring-type terminals type of connectable conductor cross-sections for main contacts finely stranded with core end processing for AWG cables for main contacts solid stranded stranded finely stranded with core end processing 2.5 16 mm² finely stranded with core end processing 2.5 16 mm² other auxiliary contacts solid finely stranded with core end processing finely stranded with core end processing solid or stranded solid or stranded 0.5 2.5 mm² 		
 at contactor for auxiliary contacts of magnet coil Spring-type terminals Spring-type terminals type of connectable conductor cross-sections for main contacts finely stranded with core end processing for AWG cables for main contacts for AWG 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 or stranded solid or stranded solid or stranded solid or stranded 0.5 2.5 mm² 		screw-type terminals
 ● of magnet coil Spring-type terminals type of connectable conductor cross-sections ● for main contacts — finely stranded with core end processing ② (2.5 35 mm²), 1x (2.5 50 mm²) ② (10 1/0), 1x (10 2) connectable conductor cross-section for main contacts ⑤ solid ⑤ stranded ⑤ finely stranded with core end processing ② finely stranded with core end processing ② finely stranded ⑤ solid or stranded ⑤ 5 2.5 mm² 	 for auxiliary and control circuit 	spring-loaded terminals
type of connectable conductor cross-sections • for main contacts — finely stranded with core end processing • for AWG cables for main contacts • solid • stranded • stranded • finely stranded with core end processing • solid • stranded • stranded • stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded	 at contactor for auxiliary contacts 	Spring-type terminals
 for main contacts — finely stranded with core end processing for AWG cables for main contacts for name conductor cross-section for main contacts solid stranded finely stranded with core end processing connectable conductor cross-section for auxiliary contacts solid or stranded 0.5 2.5 mm² 	of magnet coil	Spring-type terminals
 finely stranded with core end processing for AWG cables for main contacts 2x (2.5 35 mm²), 1x (2.5 50 mm²) 2x (10 1/0), 1x (10 2) connectable conductor cross-section for main contacts solid stranded finely stranded with core end processing finely stranded with core end processing connectable conductor cross-section for auxiliary contacts solid or stranded 0.5 2.5 mm² 	type of connectable conductor cross-sections	
 for AWG cables for main contacts connectable conductor cross-section for main contacts solid stranded finely stranded with core end processing connectable conductor cross-section for auxiliary contacts solid or stranded 0.5 2.5 mm² 	• for main contacts	
connectable conductor cross-section for main contacts • solid • stranded • stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • solid or stranded 0.5 2.5 mm²	 finely stranded with core end processing 	2x (2.5 35 mm²), 1x (2.5 50 mm²)
 solid stranded finely stranded with core end processing connectable conductor cross-section for auxiliary contacts solid or stranded 2.5 16 mm² 2.5 50 mm² 0.5 2.5 mm² 	 for AWG cables for main contacts 	2x (10 1/0), 1x (10 2)
 stranded finely stranded with core end processing connectable conductor cross-section for auxiliary contacts solid or stranded 0.5 2.5 mm² 	connectable conductor cross-section for main contacts	
 finely stranded with core end processing connectable conductor cross-section for auxiliary contacts solid or stranded 0.5 2.5 mm² 	• solid	2.5 16 mm²
connectable conductor cross-section for auxiliary contacts • solid or stranded 0.5 2.5 mm²	• stranded	6 70 mm²
connectable conductor cross-section for auxiliary contacts • solid or stranded 0.5 2.5 mm²	finely stranded with core end processing	2.5 50 mm²
• solid or stranded 0.5 2.5 mm²		
		0.5 2.5 mm²
• III'lely stranged with core end processing U.5 2.5 mm²	finely stranded with core end processing	0.5 2.5 mm ²

 finely stranded without core end processing 	0.5 2.5 mm²
type of connectable conductor cross-sections	0.0 2.0 Hilli
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 16)
AWG number as coded connectable conductor cross section	ZX (20 10)
for main contacts	10 2
• 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





Confirmation





<u>KC</u>

General Product Approval

EMV

Functional Saftey

Test Certificates

Marine / Shipping





Type Examination Certificate Type Test Certificates/Test Report

Special Test Certificate



Marine / Shipping









Confirmation

other

Special Test Certificate

Railway

Dangerous goods

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=3RT2047-3AP00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2047-3AP00

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2047-3AP00

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

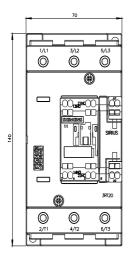
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2047-3AP00&lang=en

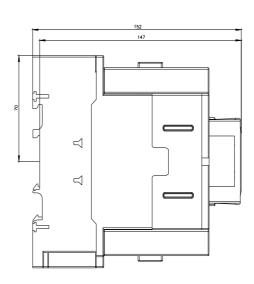
Characteristic: Tripping characteristics, I²t, Let-through current

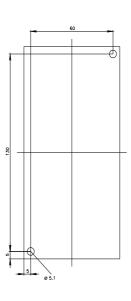
https://support.industry.siemens.com/cs/ww/en/ps/3RT2047-3AP00/char

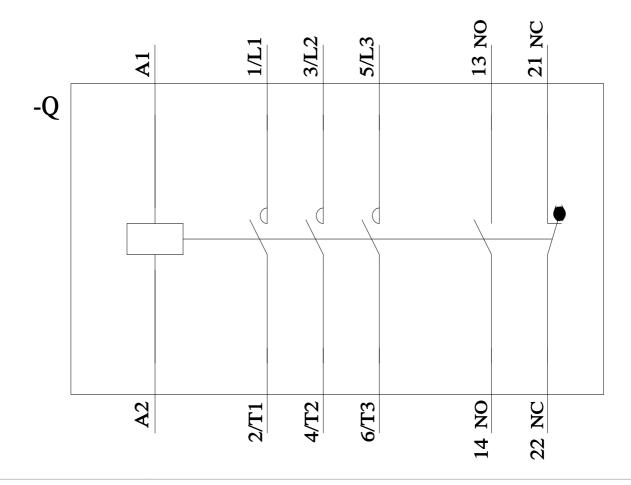
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2047-3AP00&objecttype=14&gridview=view1









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last modified: