SIEMENS

Data sheet 3RT2036-1AK64



power contactor, AC-3 50 A, 22 kW / 400 V 2 NO + 2 NC, 110 V AC 50 Hz / 120 V, 60 Hz, 3-pole, Size S2, screw terminal

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	12 W
• per pole	4 W
power loss [W] for rated value of the current without load current share typical	18.5 W
surge voltage resistance	
 of main circuit rated value 	6 kV
of auxiliary circuit rated value	6 kV
maximum permissible voltage for safe isolation between coil and main contacts acc. 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 (switching 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 acc. to IEC 81346-2	Q
Substance Prohibitance (Date)	01.10.2014 00:00:00
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
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage at AC-3 rated value maximum	690 V

operational current	70.4
 at AC-1 at 400 V at ambient temperature 40 °C rated value 	70 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C	70 A
rated value	
— up to 690 V at ambient temperature 60 °C	60 A
rated value	
• at AC-3	
— at 400 V rated value	51 A
— at 500 V rated value	51 A
— at 690 V rated value	24 A
at AC-4 at 400 V rated value at AC-5 aug to 600 V rated value	41 A 61.6 A
at AC-5a up to 690 V rated value at AC-5b up to 400 V rated value	41.5 A
at AC-5b up to 400 V rated valueat AC-6a	41.3 A
— up to 230 V for current peak value n=20 rated	43.2 A
value	70.2 A
— up to 400 V for current peak value n=20 rated	43.2 A
value	
 up to 500 V for current peak value n=20 rated value 	43.2 A
— up to 690 V for current peak value n=20 rated	24 A
value	217
• at AC-6a	
— up to 230 V for current peak value n=30 rated	28.8 A
value	
 up to 400 V for current peak value n=30 rated value 	28.8 A
— up to 500 V for current peak value n=30 rated	28.8 A
value	20.071
— up to 690 V for current peak value n=30 rated	24 A
value	
minimum cross-section in main circuit at maximum AC-1 rated value	25 mm ²
operational current for approx. 200000 operating	
cycles at AC-4	
 at 400 V rated value 	24 A
at 690 V rated value	20 A
operational current	
 at 1 current path at DC-1 	
— at 24 V rated value	55 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 reted value.	55 A
— at 24 V rated value	55 A 45 A
— at 110 V rated value — at 220 V rated value	45 A 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	0.07,
— at 24 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
operational current	
at 1 current path at DC-3 at DC-5	
— at 24 V rated value	35 A

— at 110 V rated value	2.5 A
— at 220 V rated value	1 A
— 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 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 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 	22 kW
• at AC-3	
— at 230 V rated value	15 kW
— at 400 V rated value	22 kW
— at 500 V rated value	30 kW
— at 690 V rated value	22 kW
operating power for approx. 200000 operating cycles	
at AC-4 • at 400 V rated value	12.6 kW
at 400 V rated value at 690 V rated value	18.2 kW
	IO.2 RVV
operating apparent power at AC-6a ■ up to 230 V for current peak value n=20 rated value	17.2 kV·A
 up to 230 V for current peak value n=20 rated value up to 400 V for current peak value n=20 rated value 	29.9 kV·A
• up to 500 V for current peak value n=20 rated value	37.4 kV·A
 up to 690 V for current peak value n=20 rated value 	28.6 kV·A
operating apparent power at AC-6a	20.0 RV A
up to 230 V for current peak value n=30 rated value	11.4 kV·A
• up to 400 V for current peak value n=30 rated value	19.9 kV·A
• up to 500 V for current peak value n=30 rated value	24.9 kV·A
• up to 690 V for current peak value n=30 rated value	28.6 kV·A
short-time withstand current in cold operating state	
up to 40 °C	037 A: Lisa minimum cross section ago, to AC 4 rated value
limited to 1 s switching at zero current maximum limited to 5 s switching at zero current maximum	937 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum limited to 10 s switching at zero current maximum 	697 A; Use minimum cross-section acc. to AC-1 rated value 468 A; Use minimum cross-section acc. to AC-1 rated value
	282 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum 	229 A; Use minimum cross-section acc. to AC-1 rated value 229 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	229 A, USE HIIIIIIIII GUSS-SECTION ACC. TO AC-1 TATEU VAIUE
at AC	5 000 1/h
operating frequency	V 000 1/11
at AC-1 maximum	1 000 1/h
• at AC-2 maximum	600 1/h
• at AC-3 maximum	800 1/h
• at AC-4 maximum	250 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
• at 50 Hz rated value	110 V
• at 60 Hz rated value	120 V
operating range factor control supply voltage rated value of magnet coil at AC	
● at 50 Hz	0.8 1.1

a st 60 Hz		
* at 50 Hz	● at 60 Hz	0.8 1.1
188 V A	apparent pick-up power of magnet coil at AC	
Inductive power factor with closing power of the coil	● at 50 Hz	212 V·A
	• at 60 Hz	188 V·A
* at 50 Hz	inductive power factor with closing power of the coil	
apparent holding power of magnet coil at AC at 80 Hz at 80 Hz inductive power factor with the holding power of the coil at 80 Hz at 80 Hz closing delay at 80 Hz at 80 Hz control version of the switch operating mechanism control version of the switch operating mechanism Auxillary clorult number of NC contacts for auxillary contacts instantaneous contact number of NC contacts for auxillary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-12 at 80 V rated value at 80 V rated value by at 60 V rated value challow operational current at DC-12 at 22 V rated value challow operational current at DC-13 at 20 V rated value challow operational current at DC-13 at 20 V rated value challow operational current at DC-13 at 20 V rated value challow operational current at DC-13 at 20 V rated value challow operational current at DC-13 at 20 V rated value challow operational current at DC-13 at 20 V rated value challow operational current at DC-13 at 20 V rated value challow operational current at DC-13 at 20 V rated value challow operational current at DC-13 challow operational current at	● at 50 Hz	0.69
* at 50 Hz	• at 60 Hz	0.65
* at 50 Hz	apparent holding power of magnet coil at AC	
Inductive power factor with the holding power of the coil		18.5 V·A
Inductive power factor with the holding power of the coil	• at 60 Hz	16.5 V·A
at 50 Hz		
closing delay		
closing delay	• at 50 Hz	0.36
• at AC 10 18 ms arcing time 10 20 ms control version of the switch operating mechanism 10 20 ms Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact 2 instantaneous contact 2 operational current at AC-12 maximum 10 A operational current at AC-14 3A • at 200 V rated value 6 A • at 500 V rated value 1 A • at 500 V rated value 1 A • at 24 V rated value 1 A • at 24 V rated value 6 A • at 48 V rated value 6 A • at 110 V rated value 6 A • at 125 V rated value 1 A • at 22 V rated value 2 A • at 22 V rated value 2 A • at 25 V rated value 2 A • at 27 V rated value 2 A • at 28 V rated value 2 A • at 29 V rated value 1 A • at 400 V rated value 2 A • at 48 V rated value 2 A • at 600 V rated value <td< td=""><td>• at 60 Hz</td><td>0.39</td></td<>	• at 60 Hz	0.39
• at AC 10 18 ms arcing time 10 20 ms control version of the switch operating mechanism 10 20 ms Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact 2 instantaneous contact 2 operational current at AC-12 maximum 10 A operational current at AC-14 3A • at 200 V rated value 6 A • at 500 V rated value 1 A • at 500 V rated value 1 A • at 24 V rated value 1 A • at 24 V rated value 6 A • at 48 V rated value 6 A • at 110 V rated value 6 A • at 125 V rated value 1 A • at 22 V rated value 2 A • at 22 V rated value 2 A • at 25 V rated value 2 A • at 27 V rated value 2 A • at 28 V rated value 2 A • at 29 V rated value 1 A • at 400 V rated value 2 A • at 48 V rated value 2 A • at 600 V rated value <td< td=""><td>closing delay</td><td></td></td<>	closing delay	
■ at AC arcing time control version of the switch operating mechanism Standard A1 - A2 Auxillary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NC 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 ● at 690 V rated value ● at 690 V rated value ● at 440 V rated value ● at 690 V rated value ● at 60 V rated value ● at 125 V rated value ● at 220 V rated value ● at 220 V rated value ● at 24 V rated value ● at 260 V rated value ● at 27 V rated value ● at 280 V rated value ● at 290 V rated value ○ at 60 V rated value ○ at 600 V rated value ○ at 6		10 80 ms
■ at AC arcing time control version of the switch operating mechanism Standard A1 - A2 Auxillary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NC 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 ● at 690 V rated value ● at 690 V rated value ● at 440 V rated value ● at 690 V rated value ● at 60 V rated value ● at 125 V rated value ● at 220 V rated value ● at 220 V rated value ● at 24 V rated value ● at 260 V rated value ● at 27 V rated value ● at 280 V rated value ● at 290 V rated value ○ at 60 V rated value ○ at 600 V rated value ○ at 6	opening delay	
arcing time		10 18 ms
Control version of the switch operating mechanism Auxiliary circuit		
Auxiliary circuit number of NC contacts for auxiliary contacts 2 instantaneous contact number of NC contacts for auxiliary contacts number of NC contact for auxiliary contacts number of		
number of NC contacts for auxiliary contacts instantaneous contact 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 • at 48 V rated value • at 48 V rated value • at 10 V rated value • at 20 V rated value • at 60 V rated value • at 60 V rated value • at 60 V rated value • at 11 V rated value • at 125 V rated value • at 125 V rated value • at 120 V rated value • at 120 V rated value • at 100 V rated value • at 110 V rated value • at 120 V rated value • at 20 V rated value • at 60 V rated value • at		
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 890 V rated value • at 890 V rated value • at 800 V rated value • at 800 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 125 V rated value • at 24 V rated value • at 100 V rated value • at 25 V rated value • at 25 V rated value • at 25 V rated value • at 26 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 36 O V rated value • at 48 V rated value • at 110 V rated value • at 110 V rated value • at 20 V rated value • at 30 V rated value • at 48 V rated value • at 30 V rated value • at 48 V rated value • at 110 V rated value • at 110 V rated value • at 30 V rated value • at 30 V rated value • at 48 V rated value • at 30 V rated value • at 30 V rated value • at 48 V rated value • at 48 V rated value • at 48 V rated value • at 30 V rated value • at 30 V rated value • at 48 V rated value • at 48 V rated value • at 30 V rated value • 52 A ylelded mechanical performance [hp] • for single-phase AC motor • at 480 V rated value • for 3-phase AC motor • at 20 V rated value • for 3-phase AC motor		2
number of NO contacts for auxilliary contacts instantaneous contact		2
operational current at AC-15 6 A • at 230 V rated value 6 A • at 400 V rated value 3 A • at 500 V rated value 1 A • at 690 V rated value 1 A • operational current at DC-12 10 A • at 24 V rated value 6 A • at 48 V rated value 6 A • at 60 V rated value 3 A • at 110 V rated value 2 A • at 220 V rated value 1 A • at 220 V rated value 0.15 A • operational current at DC-13 0.15 A • operational current at DC-13 0.12 A • at 48 V rated value 2 A • at 110 V rated value 1 A • at 220 V rated value 0.3 A • at 220 V rated value 0.3 A • at 600 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UU/GSA ratings 52 A vielded	number of NO contacts for auxiliary contacts	2
Operational current at AC-15		10 A
• at 230 V rated value		
 at 400 V rated value at 500 V rated value at 690 V rated value 1 A operational current at DC-12 at 24 V rated value at 80 V rated value at 48 V rated value at 6 A at 10 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 at 600 V rated value at 24 V rated value at 48 V rated value at 30 V rated value at 48 V rated value at 110 V rated value at 125 V rated value at 125 V rated value at 120 V rated value at 120 V rated value at 220 V rated value at 600 V rated value at 70 V rated value at 600 V rated value at 20 V rated	•	6 A
• at 500 V rated value • at 690 V rated value 1 A operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 48 V rated value • at 110 V rated value • at 122 V rated value • at 122 V rated value • at 220 V rated value • at 600 V rated value • at 8 V rated value • at 8 V rated value • at 8 V rated value • at 10 V rated value • at 10 V rated value • at 60 V rated value • at 10 V rated value • at 125 V rated value • at 120 V rated value • at 20 V rated value • at 600 V rated value • 52 A vielded mechanical performance [hp] • for single-phase AC motor - at 230 V rated value • for 3-phase AC motor		
• at 690 V rated value operational current at DC-12 • at 24 V rated value • at 80 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 220 V rated value • at 600 V rated value • at 800 V rated value • at 600 V rated value • at 24 V rated value • at 24 V rated value • at 25 V rated value • at 24 V rated value • at 25 V rated value • at 26 V rated value • at 27 V rated value • at 28 V rated value • at 30 V rated value • at 480 V rated value • at 30 V rated value • at 30 V rated value • 52 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value • for 3-phase AC motor		
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 220 V rated value • at 24 V rated value • at 24 V rated value • at 24 V rated value • at 60 V rated value • at 60 V rated value • at 60 V rated value • at 70 V rated value • at 80 V rated value • at 110 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 220 V rated value • at 25 V rated value • at 260 V rated value • at 60 V rated value - at 60 V rated value 52 A • at 600 V rated value • at 80 V rated value • 52 A • at 600 V rated value - at 110/120 V rated value 52 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value • for 3-phase AC motor		- 10
 at 48 V rated value at 60 V rated value at 110 V rated value at 115 V rated value at 125 V rated value at 220 V rated value at 200 V rated value at 600 V rated value operational current at DC-13 at 24 V rated value at 8 V rated value at 60 V rated value at 60 V rated value at 110 V rated value at 110 V rated value at 20 V rated value at 20 V rated value at 25 V rated value at 220 V rated value at 200 V rated value at 600 V rated value 52 A at 600 V rated value 52 A at 600 V rated value at 480 V rated value at 20 V rated value at 480 V rated value at 20 V rated value at 10 hp for 3-phase AC motor 	•	40.4
 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 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 220 V rated value at 220 V rated value at 30 V rated value at 600 V rated value 52 A at 600 V rated value at 480 V rated value at 480 V rated value at 600 V rated value at 600 V rated value at 7 Explose AC motor at 480 V rated value at 20 V rated value at 3 hp at 20 V rated value at 20 V rated value		
• at 110 V rated value 2 A • at 125 V rated value 1 A • at 220 V rated value 0.15 A operational current at DC-13 • at 24 V rated value 6 A • at 600 V rated value 6 A • at 60 V rated value 7 A • at 60 V rated value 8 A • at 60 V rated value 9 A • at 10 V rated value 9 A • at 110 V rated value 9 A • at 110 V rated value 9 A • at 125 V rated value 9 A • at 220 V rated value 9 A • at 220 V rated value 9 A • at 600 V rated Val		
 at 125 V rated value at 220 V rated value 1 A at 600 V rated value 0.15 A operational current at DC-13 at 24 V rated value 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 125 V rated value at 20 V rated value at 600 V rated value at 7 Each Value at 600 V rated value at 120 V rated value at 110 V rated value at 110 V rated value at 110 V rated value at 230 V rated value at 24 V rated value at 25 V rated value at 26 V rated value at 27 V r		
 at 220 V rated value at 600 V rated value 0.15 A 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 220 V rated value at 200 V rated value at 300 V rated value at 300 V rated value at 300 V rated value at 480 V rated value at 480 V rated value at 480 V rated value at 600 V rated value at 600 V rated value at 600 V rated value at 300 V rated value at 30 V rated value at 200 V rated value at 200 V rated value at 200 V rated value at 3 hp at 200 V rated value at 200 V rated value at 3 hp at 200 V rated value at 3 hp at 200 V rated value at 3 hp at 300 V rated value at 3 hp at 200 V rated value at 3 hp at 300 V rated value at 3 hp at 200 V rated value at 3 hp at 200 V rated value at 200 V rated value<td></td><td></td>		
• 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 • at 600 V rated value • at 600 V rated value • at 800 V rated value • at 600 V rated value • at 600 V rated value contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 300 V rated value • 3 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value • at 230 V rated value • for 3-phase AC motor		
operational current at DC-13 • at 24 V rated value		
 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 1 A at 125 V rated value 0.9 A at 220 V rated value 0.3 A at 600 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value 52 A at 600 V rated value 52 A yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value 3 hp at 230 V rated value for 3-phase AC motor 		0.15 A
 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 480 V rated value at 480 V rated value at 600 V rated value at 600 V rated value at 600 V rated value at 72 A at 110/120 V rated value at 230 V rated value at 10 hp at 73 A at 74 A at 74 A at 75 A at 75 A at 75 A at 10/120 V rated value at 10 hp 	•	
 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 480 V rated value at 600 V rated value at 100 V rated value at 200 V rated value <l< td=""><td></td><td></td></l<>		
 at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value 1 A at 600 V rated value 1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value for single-phase AC motor at 110/120 V rated value at 230 V rated value for 3-phase AC motor for 3-phase AC motor for 3-phase AC motor 	at 48 V rated value	2 A
 at 125 V rated value at 220 V rated value at 600 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value for single-phase AC motor at 110/120 V rated value at 230 V rated value for 3-phase AC motor at 230 V rated value for 3-phase AC motor 	at 60 V rated value	2 A
 at 220 V rated value at 600 V rated value 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value 52 A yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value 3 hp at 230 V rated value for 3-phase AC motor for 3-phase AC motor 	at 110 V rated value	1 A
 at 600 V rated value contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value for single-phase AC motor at 110/120 V rated value at 230 V rated value for 3-phase AC motor for 3-phase AC motor for 3-phase AC motor 	 at 125 V rated value 	0.9 A
contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value 52 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor	 at 220 V rated value 	0.3 A
## Comparison of	 at 600 V rated value 	0.1 A
## Comparison of	contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value 52 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor	UL/CSA ratings	
 at 480 V rated value at 600 V rated value yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value at 230 V rated value for 3-phase AC motor 		
● at 600 V rated value yielded mechanical performance [hp] ● for single-phase AC motor — at 110/120 V rated value — at 230 V rated value ● for 3-phase AC motor 10 hp		52 A
yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 3 hp — at 230 V rated value 10 hp • for 3-phase AC motor		
 for single-phase AC motor — at 110/120 V rated value — at 230 V rated value for 3-phase AC motor 3 hp 10 hp		
 — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor 		
— at 230 V rated value● for 3-phase AC motor		
• for 3-phase AC motor		3 hn
·	— at 110/120 V rated value	
— at 200/200 v Tateu value	— at 110/120 V rated value— at 230 V rated value	
	 at 110/120 V rated value at 230 V rated value for 3-phase AC motor 	10 hp
— at 220/230 V rated value 15 hp	 at 110/120 V rated value at 230 V rated value for 3-phase AC motor at 200/208 V rated value 	10 hp 15 hp

 at 460/480 V rated value 	40 hp
— at 575/600 V rated value	50 hp
contact rating of auxiliary contacts according to UL	A600 / Q600
Short-circuit protection	
design of the fuse link	
 for short-circuit protection of the main circuit 	
 — with type of coordination 1 required 	gG: 160 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 kA)
 — with type of assignment 2 required 	gG: 80A (690V,100kA), aM: 50A (690V,100kA), BS88: 63A (415V,80kA)
 for short-circuit protection of the auxiliary switch required 	gG: 10 A (500 V, 1 kA)
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
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
side-by-side mounting	Yes
height	114 mm
width	55 mm
depth	174 mm
required spacing	
 with side-by-side mounting 	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
 for grounded parts 	
— forwards	10 mm
— upwards	10 mm
— at the side	6 mm
— downwards	10 mm
for live parts	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	6 mm
	O THINT
Connections/ Terminals	
type of electrical connection	
for main current circuit	screw-type terminals
for auxiliary and control circuit	screw-type terminals
at contactor for auxiliary contacts	Screw-type terminals
• of magnet coil	Screw-type terminals
type of connectable conductor cross-sections	
• for main contacts	
— solid or stranded	2x (1 35 mm²), 1x (1 50 mm²)
 finely stranded with core end processing 	2x (1 25 mm²), 1x (1 35 mm²)
at AWG cables for main contacts	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 	0.5 2.5 mm²
finely stranded with core end processing	0.5 2.5 mm²
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid or stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
at AWG cables for auxiliary contacts	2x (20 16), 2x (18 14)

AWG number as coded connectable conductor cross section 18 ... 1 • for main contacts • for auxiliary contacts 20 ... 14 Safety related data product function mirror contact acc. to IEC 60947-4-1 Yes B10 value with high demand rate acc. to SN 31920 1 000 000 proportion of dangerous failures • with low demand rate acc. to SN 31920 40 % • with high demand rate acc. to SN 31920 73 % failure rate [FIT] with low demand rate acc. to SN 31920 100 FIT product function positively driven operation acc. to IEC No 60947-5-1 T1 value for proof test interval or service life acc. to 20 y **IEC 61508** protection class IP on the front acc. to IEC 60529 IP20 touch protection on the front acc. to IEC 60529 finger-safe, for vertical contact from the front

Yes

Certificates/ approvals

suitability for use

General Product Approval

• safety-related switching OFF

EMC













Functional
Safety/Safety of
Machinery

Declaration of Conformity

Test Certificates

Marine / Shipping

Type Examination Certificate



UK Declaration of Conformity Type Test Certificates/Test Report

Special Test Certificate



Marine / Shipping













other

Confirmation

Confirmation

Further information

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=3RT2036-1AK64

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2036-1AK64

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

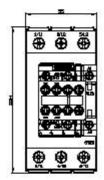
https://support.industry.siemens.com/cs/ww/en/ps/3RT2036-1AK64

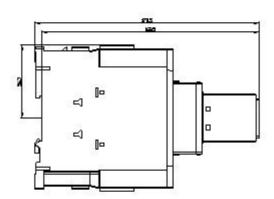
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2036-1AK64&lang=en

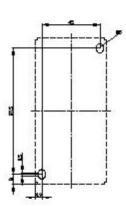
Characteristic: Tripping characteristics, I2t, Let-through current

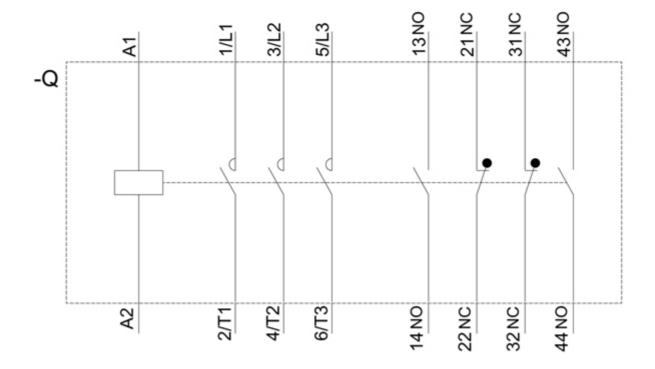
https://support.industry.siemens.com/cs/ww/en/ps/3RT2036-1AK64/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2036-1AK64&objecttype=14&gridview=view1









last modified: 12/21/2020 ☑