SIEMENS

Data sheet 3RT2036-1AP00



power contactor, AC-3 50 A, 22 kW / 400 V 1 NO + 1 NC, 230 V AC, 50 Hz, 3-pole, Size S2, screw terminal

product designation product type designation General technical data size of contactor size of contactor function module for communication function funct	product brand name	SIRIUS
Second technical data size of contactor product extension	product designation	Power contactor
size of contactor product extension • function module for communication • auxiliary switch power loss [W] for rated value of the current at AC in hot operating state • per pole • per pole • of main circuit rated value of the current without load current share typical surge voltage resistance • of main circuit rated value • of auxiliary circuit rated value • at AC shock resistance at rectangular impulse • at AC shock resistance with sine pulse • at AC at AB.5g / 5 ms, 11.6g / 10 ms mechanical service life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Q Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during operation • ambient temperature during storage • operating voltage at AC-3 rated value maximum operating voltage at AC-3 rated value maximum ferecut auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Q Ambient conditions installation altitude at height above sea level maximum operating voltage at AC-3 rated value maximum sexpectage with size of the current victous auxiliary woltage at AC-3 rated value maximum operating voltage at AC-3 rated value maximum sexpectage with size of the current at AC in No of the current with add of the current without at Wo of the contactor typical of the contactor with added auxiliary switch block typical 10 000 000 10 000 000 10 000 000 10 000 00	product type designation	3RT2
product extension • function module for communication • auxiliary switch power loss [W] for rated value of the current at AC in hot operating state • per pole power loss [W] for rated value of the current without load current share typical surge voltage resistance • of main circuit rated value • of auxiliary circuit rated value • of main cortacts acc. to EN 60947-1 shock resistance at rectangular impulse • at AC mechanical service life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical reference code acc. to EC 81346-2 Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • of portacts for main current circuit number of poles for main current circuit number of NO contacts for main contacts	General technical data	
• function module for communication • auxillary switch power loss [W] for rated value of the current at AC in hot operating state • per pole • per pole power loss [W] for rated value of the current without load current share typical surge voltage resistance • of main circuit rated value • of auxillary switch loval (a kV	size of contactor	S2
ower loss [W] for rated value of the current at AC in hot operating state o per pole power loss [W] for rated value of the current without load current share typical surge voltage resistance of main circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value in at AC shock resistance at rectangular impulse of AC at AC shock resistance with sine pulse of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Ambient conditions installation altitude at height above sea level maximum operating voltage at AC-3 rated value maximum operating voltage at AC-3 rated value maximum operating voltage at AC-3 rated value maximum 12 W 4 W 4 W 4 W 16 W 16 W 6 kV 6 kV 6 kV 7 8 kV 7 9 ms, 7.4g / 10 ms 10 ms 10 000 000 10 000 000 10 000 000 10 000 00	product extension	
power loss [W] for rated value of the current at AC in hot operating state • per pole power loss [W] for rated value of the current without load current share typical surge voltage resistance • of main circuit rated value • of auxiliary circuit rated value • of auxiliary circuit rated value • of auxiliary circuit rated value maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1 shock resistance at rectangular impulse • at AC shock resistance with sine pulse • at AC at AC shock resistance with sine pulse • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage Altitude of NO contacts for main current circuit number of Poles for main current circuit number of Poles for main current circuit operating voltage at AC-3 rated value maximum 12 W 4 W 4 W 4 W 4 W 4 W 4 W 4 W	 function module for communication 	No
operating state	auxiliary switch	Yes
power loss [W] for rated value of the current without load current share typical surge voltage resistance of main circuit rated value for MV of auxiliary circuit rated value of kV maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1 shock resistance at rectangular impulse of the Contact strain gulse of the contactor with sine pulse of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added electron		12 W
Ioad current share typical Surge voltage resistance Of main circuit rated value Of Auxiliary circuit rated value value rated value rated value rated value rated value value rated value rated value value	• per pole	_ 4 W
of main circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value amximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1 shock resistance at rectangular impulse o at AC		16 W
of auxiliary circuit rated value maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1 shock resistance at rectangular impulse ot AC ot AC interpolate the standard service life (switching cycles) of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Ambient conditions installation altitude at height above sea level maximum ombient temperature during operation ombient temperature during storage operating voltage at AC-3 rated value maximum operating voltage at AC-3 rated value maximum on the contactor with added auxiliary switch block typical conditions installation altitude at height above sea level maximum operating voltage at AC-3 rated value maximum operating voltage at AC-3 rated value maximum on the contactor vith added auxiliary switch block typical conditions installation altitude at height above sea level maximum on the contactor vith added auxiliary switch block typical conditions installation altitude at height above sea level maximum on the contactor vith added auxiliary switch block typical conditions installation altitude at height above sea level maximum on the contactor vith added auxiliary switch block typical conditions installation altitude at height above sea level maximum of NO contacts for main current circuit on the contactor vith added auxiliary switch block typical conditions installation altitude at height above sea level maximum of NO contacts for main current circuit on the contactor vith added auxiliary switch block typical of NO contacts for EN 60 V	surge voltage resistance	
maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1 shock resistance at rectangular impulse • at AC shock resistance with sine pulse • at AC mechanical service life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with ad		
coil and main contacts acc. to EN 60947-1 shock resistance at rectangular impulse • at AC shock resistance with sine pulse • at AC 18.5g / 5 ms, 7.4g / 10 ms mechanical service life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during storage • and or C • ambient temperature during storage • and or C • ambient temperature during storage • and or C • ambient temperature during storage • and or C • ambient temperature during storage • and or C • ambient temperature during storage • and or C • ambient temperature during storage • and or C • ambient temperature during storage • and or C • ambient temperature during storage • and or C • and	of auxiliary circuit rated value	6 kV
* at AC * shock resistance with sine pulse * at AC * at AC * 18.5g / 5 ms, 11.6g / 10 ms mechanical service life (switching cycles) * of contactor typical * of the contactor with added electronically optimized auxiliary switch block typical * of the contactor with added auxiliary switch block typical * of the contactor with added auxiliary switch block typical * of the contactor with added auxiliary switch block typical * of the contactor with added auxiliary switch block typical * of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Q Ambient conditions installation altitude at height above sea level maximum * ambient temperature during operation * ambient temperature during storage * of the contactor with added electronically optimized * ambient temperature during operation * ambient temperature during storage 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		400 V
shock resistance with sine pulse • at AC mechanical service life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage Main circuit number of poles for main current circuit number of NO contacts for main contacts • operating voltage at AC-3 rated value maximum 10 000 000 10 000 000 10 000 000 20 000 10 000 000 10 000 000 10 000 00	shock resistance at rectangular impulse	
at AC mechanical service life (switching cycles) of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation ambient temperature during storage Main circuit number of poles for main current circuit number of NO contacts for main contacts operating voltage at AC-3 rated value maximum 10 000 000 10 000 000 10 000 000 10 000 00		11.8g / 5 ms, 7.4g / 10 ms
mechanical service life (switching cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Q Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage -25 +60 °C • ambient temperature during storage Main circuit number of poles for main current circuit number of NO contacts for main contacts • operating voltage at AC-3 rated value maximum 690 V	shock resistance with sine pulse	
 of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Q Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation -25 +60 °C ambient temperature during storage -55 +80 °C Main circuit number of poles for main current circuit number of NO contacts for main contacts operating voltage at AC-3 rated value maximum 690 V 	• at AC	18.5g / 5 ms, 11.6g / 10 ms
 of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation ambient temperature during storage -25 +60 °C ambient temperature during storage Main circuit number of poles for main current circuit number of NO contacts for main contacts operating voltage at AC-3 rated value maximum 5 000 000 10 000 000 10 000 000 10 000 000 10 000 000 10 000 00 10	mechanical service life (switching cycles)	
auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code acc. to IEC 81346-2 Ambient conditions installation altitude at height above sea level maximum ombient temperature during operation ombient temperature during storage -25 +60 °C ombient circuit number of poles for main current circuit number of NO contacts for main contacts operating voltage at AC-3 rated value maximum 10 000 000 10 000 000 10 000 000 10 000 00	 of contactor typical 	10 000 000
typical reference code acc. to IEC 81346-2 Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage -25 +60 °C • ambient temperature during storage -55 +80 °C Main circuit number of poles for main current circuit number of NO contacts for main contacts • operating voltage at AC-3 rated value maximum 690 V		5 000 000
Ambient conditions installation altitude at height above sea level maximum ● ambient temperature during operation • ambient temperature during storage -25 +60 °C • ambient temperature during storage -55 +80 °C Main circuit number of poles for main current circuit number of NO contacts for main contacts • operating voltage at AC-3 rated value maximum 690 V		10 000 000
installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage -25 +60 °C • ambient temperature during storage -55 +80 °C Main circuit number of poles for main current circuit number of NO contacts for main contacts • operating voltage at AC-3 rated value maximum 690 V	reference code acc. to IEC 81346-2	Q
 ambient temperature during operation ambient temperature during storage -25 +60 °C Main circuit number of poles for main current circuit number of NO contacts for main contacts operating voltage at AC-3 rated value maximum -25 +60 °C 3 690 V 	Ambient conditions	
■ ambient temperature 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	installation altitude at height above sea level maximum	2 000 m
Main circuit number of poles for main current circuit number of NO contacts for main contacts • operating voltage at AC-3 rated value maximum 690 V	 ambient temperature during operation 	-25 +60 °C
number of poles for main current circuit number of NO contacts for main contacts operating voltage at AC-3 rated value maximum 690 V	 ambient temperature during storage 	-55 +80 °C
number of NO contacts for main contacts ● operating voltage at AC-3 rated value maximum 690 V	Main circuit	
operating voltage at AC-3 rated value maximum 690 V	number of poles for main current circuit	3
1,000	number of NO contacts for main contacts	3
	operating voltage at AC-3 rated value maximum	690 V

 at AC-1 at 400 V at ambient temperature 40 °C rated value at AC-1 	70 A
— up to 690 V at ambient temperature 40 $^{\circ}\text{C}$ rated value	70 A
 up to 690 V at ambient temperature 60 °C rated value 	60 A
• 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	41 A
• at AC-5a up to 690 V rated value	61.6 A
at AC-5b up to 400 V rated value	41.5 A
• at AC-6a	
— up to 230 V for current peak value n=20 rated value	43.2 A
— up to 400 V for current peak value n=20 rated value	43.2 A
 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 value at AC-6a 	24 A
— up to 230 V for current peak value n=30 rated value	28.8 A
— 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 value 	28.8 A
— up to 690 V for current peak value n=30 rated value	24 A
value	
minimum cross-section in main circuit at maximum AC-1 rated value	25 mm²
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4	
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating	24 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4	
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current	24 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1	24 A 20 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value	24 A 20 A 55 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value	24 A 20 A 55 A 4.5 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value	24 A 20 A 55 A 4.5 A 1 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value	24 A 20 A 55 A 4.5 A 1 A 0.4 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value	24 A 20 A 55 A 4.5 A 1 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1	24 A 20 A 55 A 4.5 A 1 A 0.4 A 0.25 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value	24 A 20 A 55 A 4.5 A 1 A 0.4 A 0.25 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value • at 110 V rated value • with 2 rated value — at 110 V rated value — at 110 V rated value	24 A 20 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 220 V rated value	24 A 20 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A 5 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 120 V rated value — at 440 V rated value	24 A 20 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A 5 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 24 V rated value — at 24 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value	24 A 20 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A 5 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 440 V rated value — at 440 V rated value — at 600 V rated value	24 A 20 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A 5 A 1 A 0.8 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 220 V rated value — at 440 V rated value — at 440 V rated value — at 24 V rated value — at 600 V rated value — at 600 V rated value • with 3 current paths in series at DC-1 — at 24 V rated value	24 A 20 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A 5 A 1 A 0.8 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 440 V rated value — at 600 V rated value — at 220 V rated value — at 220 V rated value — at 24 V rated value — at 220 V rated value — at 440 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 24 V rated value • with 3 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value	24 A 20 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A 5 A 1 A 0.8 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 440 V rated value — at 110 V rated value — at 220 V rated value — at 220 V rated value — at 24 V rated value — at 440 V rated value — at 440 V rated value — at 24 V rated value — at 24 V rated value — at 24 V rated value • with 3 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 220 V rated value — at 220 V rated value	24 A 20 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A 5 A 1 A 0.8 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 110 V rated value — at 220 V rated value — at 24 V rated value — at 24 V rated value — at 24 V rated value — at 440 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 24 V rated value — at 220 V rated value — at 220 V rated value — at 440 V rated value	24 A 20 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A 5 A 1 A 0.8 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 110 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 440 V rated value — at 440 V rated value — at 24 V rated value — at 24 V rated value — at 24 V rated value — at 440 V rated value	24 A 20 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A 5 A 1 A 0.8 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 110 V rated value — at 220 V rated value — at 24 V rated value — at 24 V rated value — at 220 V rated value — at 440 V rated value — at 440 V rated value — at 220 V rated value — at 600 V rated value — at 110 V rated value — at 24 V rated value — at 24 V rated value — at 440 V rated value — at 440 V rated value — at 110 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 600 V rated value	24 A 20 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A 5 A 1 A 0.8 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 110 V rated value — at 220 V rated value — at 24 V rated value — at 24 V rated value — at 24 V rated value — at 440 V rated value — at 440 V rated value — at 600 V rated value — at 24 V rated value — at 24 V rated value — at 440 V rated value — at 440 V rated value — at 440 V rated value — at 110 V rated value — at 440 V rated value — at 440 V rated value — at 600 V rated value	24 A 20 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A 5 A 1 A 0.8 A 55 A 55 A 55 A 55 A 55 A 55 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 110 V rated value — at 220 V rated value — at 24 V rated value — at 220 V rated value — at 220 V rated value — at 440 V rated value — at 440 V rated value — at 440 V rated value — at 220 V rated value — at 24 V rated value — at 24 V rated value — at 24 V rated value — at 440 V rated value — at 440 V rated value — at 440 V rated value — at 600 V rated value	24 A 20 A 55 A 4.5 A 1 A 0.4 A 0.25 A 55 A 45 A 5 A 1 A 0.8 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	0.0071
• 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 — at 690 V rated value	22 kW
operating power for approx. 200000 operating cycles	ZZ NVV
at AC-4	
at 400 V rated value	12.6 kW
at 690 V rated value	18.2 kW
operating apparent power at AC-6a	
up to 230 V for current peak value n=20 rated value	17.2 kV·A
• 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 KV //
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	20.0 KV A
up to 40 °C	
 limited to 1 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 	697 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	468 A; Use minimum cross-section acc. to AC-1 rated value
Iimited to 30 s switching at zero current maximum	282 A; Use minimum cross-section acc. to AC-1 rated value
Iimited to 60 s switching at zero current maximum	229 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	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	7.0
at 50 Hz rated value	230 V
operating range factor control supply voltage rated	200 0
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 V·A



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 V·A
inductive power factor with the holding power of the	
coil	
● at 50 Hz	0.37
closing delay	
• at AC	10 80 ms
opening delay	
• at AC	10 18 ms
arcing time	10 20 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous contact	1
number of NO contacts for auxiliary contacts instantaneous contact	1
operational current at AC-12 maximum	10 A
operational current at AC-15	
at 230 V rated value	10 A
• at 400 V rated value	3 A
• at 500 V rated value	2 A
• at 690 V rated value	1 A
operational current at DC-12	
at 24 V rated value	10 A
at 48 V rated value	6 A
at 60 V rated value	6 A
• at 110 V rated value	3 A
• at 125 V rated value	2 A
• at 220 V rated value	1 A
• at 600 V rated value	0.15 A
operational current at DC-13	
at 24 V rated value	10 A
at 48 V rated value	2 A
at 60 V rated value	2 A
• at 110 V rated value	1 A
• at 125 V rated value	0.9 A
at 220 V rated value	0.3 A
• at 600 V rated value	0.1 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	5 to 3 to 3 to 5 to 5 to 5 to 5 to 5 to
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	52 A
at 600 V rated value	52 A
yielded mechanical performance [hp]	<u></u>
• 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	
— at 200/208 V rated value	15 hp
— at 220/230 V rated value	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 / P600
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



— with type of assignment 2 required

• for short-circuit protection of the auxiliary switch required

V, 80 kA)

gG: 80A (690V,100kA), aM: 50A (690V,100kA), BS88: 63A (415V,80kA) gG: 10 A (500 V, 1 kA)

required	go. 10 A (300 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	130 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
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 mm ²
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 for main contacts 	18 1
 AWG number as coded connectable conductor cross section for auxiliary contacts 	20 14
Safety related data	
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	
 mirror contact acc. to IEC 60947-4-1 	Yes
 positively driven operation acc. to IEC 60947-5-1 	No
T1 value for proof test interval or service life acc. to IEC 61508	20 y
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
suitability for use safety-related switching OFF	Yes

Certificates/ approvals

General Product Approval

EMC







<u>KC</u>





Declaration of Conformity

Test Certificates

Marine / Shipping

Miscellaneous



Special Test Certificate

Type Test **Certificates/Test** Report





Marine / Shipping











Confirmation

other

other

Confirmation

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

siemens.com/ic10

Industry Mall (Online ordering system)

mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2036-1AP00

Cax online generator

support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2036-1AP00

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

support.industry.siemens.com/cs/ww/en/ps/3RT2036-1AP00

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2036-1AP00&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current support.industry.siemens.com/cs/ww/en/ps/3RT2036-1AP00/char

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

automation. siemens. com/bilddb/index. aspx?view=Search&mlfb=3RT2036-1AP00&objecttype=14&gridview=view1. AP00&objecttype=14&gridview=view1. AP00&objecttyp









