SIEMENS

Data sheet

3RT2047-1AK60



power contactor, AC-3e/AC-3, 110 A, 55 kW / 400 V, 3-pole, 110 V AC, 50 Hz / 120 V, 60 Hz, auxiliary contacts: 1 NO + 1 NC, screw terminal, size: S3 $\,$

product brand name SIRUS product designation Power contactor product type designation SRT2 central technical data State of contactor size of contactor State of contactor product stansion No • function module for communication No • auxiliary switch Yes power loss [VI] for rated value of the current State of contactor • 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 22 W insultation voltage 1000 V • of main circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit rated value 8 kV • of auxiliary circuit rated value 8 kV • of auxiliary circuit rated value 8 kV • of auxiliary circuit rated value 90 V • of auxiliary circuit rated value 8 kV • of auxiliary circuit rated value 90 V • of auxiliary circuit rated value 10.3g / 5 ms, 6.g / 10 ms machine contactor with added auxiliary switch block typical <t< th=""><th>6/3</th><th></th></t<>	6/3	
product type designation 3RT2 General technical data	product brand name	SIRIUS
General technical data S3 size of contactor S3 product extension No • function module for communication No • auxiliary switch Yes power loss [W] for rated value of the current 23.7 W • at AC in hot operating state 23.7 W • at AC in hot operating state 23.7 W • without load current share typical 22.7 W • without load current share typical 22.7 W • of main circuit with degree of pollution 3 rated value 1000 V • of auxiliary circuit with degree of pollution 3 rated value 690 V surge voltage resistance 8 kV • of auxiliary circuit rated value 8 kV • of auxiliary circuit rated value 680 V • of auxiliary circuit rated value 680 V • of auxiliary circuit rated value 10.3g / 5 ms, 6. g / 10 ms • at AC 10.3g / 5 ms, 10. g / 10 ms mechanical service life (operating cycles) 10000 000 • of the contactor with added acteronically optimized auxiliary switch block typical 10000 000 • of the contactor with added acteronically optimized auxiliary switch block typical 10000 000 • of the contactor with added acteronically optimized auxiliary switch block typical 10000 000 • of the contactor with added acteronically optimized auxili	product designation	Power contactor
size of contactor §3 product extension • function module for communication No • auxilary switch Yes power loss [W] for rated value of the current • at AC in hot operating state per pole 7.9 W • at AC in hot operating state per pole 7.9 W • of main circuit with degree of pollution 3 rated value 1000 V • of main circuit with degree of pollution 3 rated value 690 V sugges voltage resistance 8 kV • of main circuit with degree of pollution 3 rated value 690 V sugges voltage resistance 6 kV • of main circuit with degree of pollution 3 rated value 690 V sugges voltage resistance 6 kV • of main circuit rated value 6 kV maximum permissible voltage for protective separation between coll and main contrates according to EN 60947-1 600 V shock resistance with sine pulse • at AC • at AC 16.3g / 5 ms, 6g / 10 ms mechanical service life (operating cycles) 0 000 000 • of the contactor with added electronically optimized 1000 000 • of the contactor with added electronically optimized 10000 000 • of the contactor with added electronically optimized 0001/2017 Ambient conditions 0000/1000 reference code according to EEC 60068-2-30 <td< th=""><th>product type designation</th><th>3RT2</th></td<>	product type designation	3RT2
product extension No • function module for communication No • auxiliary switch Yes power loss [W] for rated value of the current 23.7 W • at AC in hot operating state prole 7.9 W • withoot load current share typical 22 W Insulation voltage 1000 V • of main circuit with degree of pollution 3 rated value 600 V surge voltage resistance 68 V • of main circuit rated value 8 kV • of main circuit rated value 690 V surge voltage resistance 690 V • of main circuit rated value 8 kV • of main circuit rated value 6 kV maximum permissible voltage for protective separation between coll and main contacts according to EN 60947-1 690 V shock resistance at rectangular impulse 64 AC • at AC 10.3g / 5 ms, 6.g / 10 ms shock resistance with sine pulse 10 000 000 • at AC 10 300 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 0 Q Subcar resistance to the Contactor with added auxiliary switch block typical 0 Q • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000	General technical data	
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• auxiliary switch Yes power loss [W] for rated value of the current 23.7 W • 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 22 W insuliary circuit with degree of pollution 3 rated value 600 V • of main circuit rated value 690 V • of main circuit rated value 8 kV • of auxiliary circuit with degree of pollution 3 rated value 600 V surge voltage resistance 6 kV • of auxiliary circuit with degree of pollution 3 rated value 8 kV • of auxiliary circuit rated value 8 kV • at AC 10.3g / 5 ms, 6, g / 10 ms shock resistance at rectangular impulse • at AC • at AC 10.3g / 5 ms, 10, g / 10 ms mechanical service life (operating cycles) • of contactor typical • of contactor with added electonically optimized auxiliary switch block typical 10 0000 000 • of the contactor with	product extension	
power loss [W] for rated value of the current 23.7 W • at AC in hot operating state per pole 7.9 W • without load current share typical 22 W insulation voltage 1 000 V • of main circuit with degree of pollution 3 rated value 690 V surge voltage resistance 690 V • of main circuit with degree of pollution 3 rated value 84V • of auxiliary circuit rated value 8 kV • of auxiliary circuit rated value 8 kV • of auxiliary circuit rated value 6 kV • of auxiliary circuit rated value 6 kV • of auxiliary circuit rated value 8 kV • of auxiliary circuit rated value 6 kV • of auxiliary circuit rated value 8 kV • of auxiliary circuit rated value 8 kV • of auxiliary circuit rated value 10.3 g / 5 ms, 6, g / 10 ms shock resistance at rectangular inpulse 6 k0 V • at AC 10.3 g / 5 ms, 6, g / 10 ms mechanical service life (operating cycles) 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch b	 function module for communication 	No
• 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 22 W insultation voltage 22 W • of main circuit with degree of pollution 3 rated value 1000 V • of auxiliary circuit with degree of pollution 3 rated value 690 V surge voltage resistance 690 V • of main circuit rated value 8 kV • of auxiliary circuit rated value 6 kV maximum permissible voltage for protective separation between coll and main contacts according to EN 60947-1 690 V shock resistance at rectangular impulse 630 V • at AC 10.3g / 5 ms, 6.g / 10 ms shock resistance with sine pulse 63.3g / 5 ms, 10.g / 10 ms • at AC 10.000 000 • of the contactor typical 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added electronically optimized 03/01/2017 03/01/2017 Ambient conditions 25 +60 °C installation altitude at height above sea level maximum 200 m ambient temperature -40 uring storage -55 +60 °C • during	auxiliary switch	Yes
• at AC in hot operating state per pole 7.9 W • without load current share typical 22 W insulation voltage 1000 V • of main circuit with degree of pollution 3 rated value 690 V surge voltage resistance 690 V • of main circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit rated value 8 kV • of auxiliary 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 • at AC 10.3g / 5 ms, 6. g / 10 ms • bock resistance at rectangular impulse 10.3g / 5 ms, 10. g / 10 ms • at AC 10.3g / 5 ms, 10. g / 10 ms • at AC 10 000 000 • of contactor typical 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 0 000 000 reference code according to IEC 81346-2 Q	power loss [W] for rated value of the current	
• without load current share typical 22 W 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 690 V • of main circuit rated value 8 kV • of auxiliary circuit rated value 90 V • at AC 10.3g / 5 ms, 6.g / 10 ms • at AC 16.3g / 5 ms, 10.g / 10 ms • at AC 10 000 000 • of the contactor typical 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 30/1/2017 Ambient conditions - installation altitude at height above sea level maximum	 at AC in hot operating state 	23.7 W
Insulation voltage 1 000 V • 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 690 V • of main circuit rated value 8 kV • of auxiliary circuit rated value 8 kV • at AC 10.3g / 5 ms, 6, g / 10 ms shock resistance with sine pulse 16.3g / 5 ms, 10.g / 10 ms • at AC 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 8136-2 Q Substance Prohibitance (Date) 03/01/2017 Ambient temperature - - • during storage -25	 at AC in hot operating state per pole 	7.9 W
• 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 8 kV • of main circuit rated value 8 kV maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 690 V shock resistance at rectangular impulse 690 V • at AC 10.3g / 5 ms, 6.g / 10 ms shock resistance with sine pulse 10 000 000 • of contactor typical 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 efference code according to IEC 81346-2 Q Substance Prohibitance (Date) 03/01/2017 Ambient conditions -25 +60 °C • during operation -25 +60 °C • during storage -55 +60 °C • during storage -55 +60 °C • felative humidity at 55 °C according to IEC 60068-2.30 95 %	 without load current share typical 	22 W
• of auxiliary circuit with degree of pollution 3 rated value 690 V surge voltage resistance 8 KV • 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 690 V • at AC 10.3g / 5 ms, 6, g / 10 ms shock resistance with sine pulse 10.3g / 5 ms, 10.g / 10 ms • at AC 16.3g / 5 ms, 10.g / 10 ms mechanical service life (operating cycles) 10 000 000 • of contactor typical 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 03/01/2017 Ambient conditions 2 000 m installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C • during storage -55 +60 °C r	insulation voltage	
surge voltage resistance 8 kV • of main circuit rated value 8 kV • of auxiliary circuit rated value 6 kV maximum permissible voltage for protective separation between 690 V coll and main contacts according to EN 60947-1 690 V shock resistance at rectangular impulse 6.g / 10 ms • at AC 10.3g / 5 ms, 6.g / 10 ms shock resistance with sine pulse 16.3g / 5 ms, 10.g / 10 ms • of contactor typical 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 03/01/2017 Ambient conditions -25 +60 °C • during operation -25 +60 °C • during storage -55 +60 °C <t< th=""><th> of main circuit with degree of pollution 3 rated value </th><th>1 000 V</th></t<>	 of main circuit with degree of pollution 3 rated value 	1 000 V
• of main circuit rated value 8 kV • of auxiliary circuit rated value 6 kV maximum permissible voltage for protective separation between coll and main contacts according to EN 60947-1 690 V shock resistance at rectangular impulse 690 V • at AC 10.3g / 5 ms, 6, g / 10 ms shock resistance with sine pulse 16.3g / 5 ms, 10.g / 10 ms • at AC 16.3g / 5 ms, 10.g / 10 ms mechanical service life (operating cycles) 0000 000 • of the contactor typical 10 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 0 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 03/01/2017 Ambient conditions 2000 m ambient temperature -55 +60 °C • during operation -25 +60 °C • during storage -55 +80 °C relative humidity minum 10 % 95 % 95 %	 of auxiliary circuit with degree of pollution 3 rated value 	690 V
• 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 690 V • 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 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 03/01/2017 Amblent conditions 2000 m installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C • during storage -55 +80 °C relative humidity minimum 10 % 95 % 95 %	surge voltage resistance	
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 of the contactor with added auxiliary switch block typical of othe contactor with added auxiliary switch block typical of othe contactor with added auxiliary switch block typical of othe contactor with added auxiliary switch block typical 0000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 03/01/2017 Ambient conditions 2 000 m installation altitude at height above sea level maximum 2 000 m ambient temperature during operation -25 +60 °C elative humidity minimum 10 % 95 % Main circuit 	 of main circuit rated value 	8 kV
coil and main contacts according to EN 60947-1 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 • 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 go to EX 81346-2 Q Substance Prohibitance (Date) 03/01/2017 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	 of auxiliary circuit rated value 	6 kV
• at AC 10.3g / 5 ms, 6.g / 10 ms shock resistance with sine pulse 16.3g / 5 ms, 10.g / 10 ms • at AC 16.3g / 5 ms, 10.g / 10 ms mechanical service life (operating cycles) 0 000 000 • 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 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 03/01/2017 Ambient conditions 2 000 m installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C • during operation -25 +80 °C relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 95 % Main circuit		690 V
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• at AC 16.3g / 5 ms, 10.g / 10 ms mechanical service life (operating cycles) 0 • 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 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 03/01/2017 Ambient conditions 2 000 m installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C • during operation -25 +80 °C relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 95 % Main circuit Main circuit	• at AC	10.3g / 5 ms, 6,.g / 10 ms
mechanical service life (operating cycles) 10 000 000 • 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 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 03/01/2017 Ambient conditions 2 000 m installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C • 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 95 % Main circuit Main circuit	shock resistance with sine pulse	
• of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical5 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000reference code according to IEC 81346-2QSubstance Prohibitance (Date)03/01/2017Ambient conditions2 000 minstallation altitude at height above sea level maximum2 000 mambient temperature • during operation • during storage-25 +60 °Crelative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum95 %	• at AC	16.3g / 5 ms, 10.g / 10 ms
 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 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 03/01/2017 Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature during operation -25 +60 °C -55 +80 °C relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit 	mechanical service life (operating cycles)	
auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 03/01/2017 Ambient conditions 2 000 m installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C • during operation -25 +60 °C • during storage -55 +80 °C relative humidity minimum 10 % Main circuit 95 %	 of contactor typical 	10 000 000
reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 03/01/2017 Ambient conditions 2 000 m installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C • 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 %		5 000 000
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Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature -25 +60 °C • 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 % Main circuit	reference code according to IEC 81346-2	Q
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 % Main circuit 400 m	Substance Prohibitance (Date)	03/01/2017
ambient temperature -25 +60 °C • 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 % Main circuit	Ambient conditions	
 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 g5 % Main circuit 	installation altitude at height above sea level maximum	2 000 m
• during storage -55 +80 °C relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum 95 % Main circuit	ambient temperature	
relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 95 % Main circuit 95 %	during operation	-25 +60 °C
relative humidity at 55 °C according to IEC 60068-2-30 95 % Main circuit 95 %	during storage	-55 +80 °C
maximum Main circuit	relative humidity minimum	10 %
		95 %
number of poles for main current circuit 3	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	1 000 V
 at AC-3e rated value maximum 	1 000 V
operational current	
 at AC-1 at 400 V at ambient temperature 40 °C rated 	130 A
value	
• at AC-1	
 — up to 690 V at ambient temperature 40 °C rated value 	130 A
— up to 690 V at ambient temperature 60 °C rated value	110 A
• 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	
— 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	
— 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	
— 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	65.3 A
— up to 500 V for current peak value n=30 rated value	65.3 A
— 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	50 mm ²
value	
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 600 V rated value	1 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 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	40.4
— at 24 V rated value	40 A
— at 60 V rated value — at 110 V rated value	6 A 2.5 A
— at 220 V rated value	1 A
— at 440 V rated value — at 600 V rated value	0.15 A 0.06 A
 with 2 current paths in series at DC-3 at DC-5 	0.06 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	
— 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	
• 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	
 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 	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 10 s 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
Imited to 60 s switching at zero current maximum	562 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at AC	5 000 1/h
• at AC-1 maximum	900 1/h

• at AC-2 maximum	350 1/h
• at AC-3 maximum	850 1/h
• at AC-3e maximum	850 1/h
• at AC-4 maximum	200 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
• at 60 Hz	0.8 1.1
apparent pick-up power of magnet coil at AC	
● at 50 Hz	326 VA
• at 60 Hz	326 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.62
• at 60 Hz	0.55
apparent holding power of magnet coil at AC	
• at 50 Hz	22 VA
• at 60 Hz	22 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.36
• at 60 Hz	0.4
closing delay	
• at AC	13 50 ms
opening delay	
• at AC	10 21 ms
arcing time	10 20 ms Standard A1 - A2
	Slandard AT - AZ
control version of the switch operating mechanism	
Auxiliary circuit	
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact	1
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous	
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous	1
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact	1
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
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
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
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
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
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
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 • at 690 V rated value	1 1 10 A 6 A 3 A 2 A 1 A
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 • at 24 V rated value	1 1 10 A 6 A 3 A 2 A 1 A 10 A
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 • at 690 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
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 • at 690 V rated value • at 24 V rated value • at 24 V rated value • at 48 V rated value • at 48 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
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 • at 24 V rated value • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 410 V rated value	1 1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A 10
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 • at 24 V rated value • at 24 V rated value • at 48 V rated value • at 400 V rated value • at 25 V rated value • at 110 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
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 • at 24 V rated value • at 24 V rated value • at 48 V rated value • at 400 V rated value • at 25 V rated value • at 110 V rated value • at 220 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 3 A 2 A 1 A 10 A 6 A 3 A 2 A 1 A 10 A 1
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 • at 24 V rated value • at 48 V rated value • at 40 V rated value • at 24 V rated value • at 250 V rated value • at 24 V rated value • at 250 V rated value • at 260 V rated value • at 272 • at 28 V rated value • at 29 V rated value • at 110 V rated value • at 220 V rated value • at 600 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 10 1
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 • at 48 V rated value • at 48 V rated value • at 48 V rated value • at 10 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 220 V rated value • at 600 V rated value • at 48 V rated value • at 24 V rated value • at 24 V rated value • at 24 V rated value • at 48 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 6 A 3 A 2 A 1 A 10 A 10 A 6 A 10 A
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 • at 48 V rated value • at 48 V rated value • at 40 V rated value • at 500 V rated value • at 690 V rated value • at 690 V rated value • at 48 V rated value • at 24 V rated value • at 25 V rated value • at 10 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 48 V rated value • at 48 V rated value • at 24 V rated value • at 48 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 6 A 6 A 6 A 3 A 2 A 1 A 10 A
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 • at 400 V rated value • at 20 V rated value • at 21 V rated value • at 110 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 24 V rated value • at 48 V rated value • at 24 V rated value • at 24 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 6 A 6 A 6 A 3 A 2 A 1 A 10 A 1
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 • at 690 V rated value • at 400 V rated value • at 410 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 600 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 3 A 2 A 1 A 10 A 6 A 6 A 1 A 10 A 6 A 6 A 6 A 1 A 10 A 2 A 1 A 0.15 A
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 • at 600 V rated value • at 48 V rated value • at 60 V rated value • at 60 V rated value • at 24 V rated value • at 60 V rated value • at 220 V rated value • at 60 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 24 V rated value • at 600 V rated value • at 24 V rated value • at 10 V rated value • at 110 V rated value	1 1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 1 A 10 A 6 A 6 A 6 A 1 A 10 A 2 A 1 A 0.15 A
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 • at 690 V rated value • at 48 V rated value • at 48 V rated value • at 110 V rated value • at 220 V rated value • at 24 V rated value • at 25 V rated value • at 600 V rated value • at 600 V rated value • at 220 V rated value • at 24 V rated value • at 60 V rated value • at 10 V rated value • at 10 V rated value <t< td=""><td>1 1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 3 A 2 A 1 A 10 A 6 A 1 A 10 A 2 A 1 A 0.15 A 10 A 2 A 1 A 0.15 A</td></t<>	1 1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 3 A 2 A 1 A 10 A 6 A 1 A 10 A 2 A 1 A 0.15 A 10 A 2 A 1 A 0.15 A
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 500 V rated value • at 690 V rated value • at 690 V rated value • at 48 V rated value • at 24 V rated value • at 25 V rated value • at 220 V rated value • at 600 V rated value • at 24 V rated value • at 220 V rated value • at 600 V rated value • at 220 V rated value • at 24 V rated value • at 25 V rated value • at 20 V rated value • at 2110 V rated value • at 220 V rated value • at 125 V rated value • at 220 V rated value	1 1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 1 A 10 A 6 A 6 A 6 A 1 A 10 A 2 A 1 A 0.15 A 10 A 2 A 1 A 0.9 A 0.3 A
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 • at 690 V rated value • at 48 V rated value • at 48 V rated value • at 110 V rated value • at 220 V rated value • at 24 V rated value • at 25 V rated value • at 600 V rated value • at 600 V rated value • at 220 V rated value • at 24 V rated value • at 60 V rated value • at 10 V rated value • at 110 V rated value <	1 1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 3 A 2 A 1 A 10 A 6 A 1 A 10 A 2 A 1 A 0.15 A 10 A 2 A 1 A 0.15 A

a at 400 V retail value			
at 480 V rated value	96 A		
• at 600 V rated value yielded mechanical performance [hp]	99 A		
for single-phase AC motor			
- at 110/120 V rated value	10 hp		
— at 230 V rated value	20 hp		
for 3-phase AC motor	2011		
- at 200/208 V rated value	30 hp		
— at 220/230 V rated value	40 hp		
— at 460/480 V rated value	75 hp		
— at 575/600 V rated value	100 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: 250 A (690 V, 100 kA), aM: 160 A (690 V, 100 kA), BS88: 200 A (415 V, 80 kA)		
— with type of assignment 2 required	gG: 200A (690V,100kA), aM: 100A (690V,100kA), BS88: 160A (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 DIN rail according to DIN EN 60715		
side-by-side mounting	Yes		
height	140 mm		
width	70 mm		
depth	152 mm		
required spacing			
 with side-by-side mounting — forwards 	20 mm		
— upwards	10 mm		
— downwards	10 mm		
— at the side	0 mm		
for grounded parts	U TIIII		
- 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		
— at the side	10 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			
 finely stranded with core end processing 	2x (2.5 35 mm²), 1x (2.5 50 mm²)		
connectable conductor cross-section for main contacts			
• solid	2.5 16 mm ²		
• stranded	6 70 mm ²		
finely stranded with core end processing	2.5 50 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	$2 \times (0.5 - 4.5 \text{ mm}^2) \cdot 2 \times (0.75 - 0.5 \text{ mm}^2)$		
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)		

— finely stran	ded with core end process	sing 2x	(0.5 1.5 mm²), 2x (0.75 .	2 5 mm²)	
 finely stranded with core end processing for AWG cables for auxiliary contacts 			(20 16), 2x (18 14)		
	d connectable conducto		(
for main contacts		10	2		
 for auxiliary cont 	acts	20	14		
Safety related data					
product function					
 mirror contact ac 	cording to IEC 60947-4-1	Ye	S		
	operation according to IE	C 60947-5-1 No			
suitability for use safety		Ye	S		
	mand rate according to SN	N 31920 1 0	000 000		
proportion of dangero					
	rate according to SN 319	20 40	%		
	d rate according to SN 31		%		
	w demand rate according		0 FIT		
	nterval or service life acco		а		
protection class IP on	the front according to I	EC 60529 IP2	20		
touch protection on th	ne front according to IEC	60529 fin	ger-safe, for vertical contac	t from the front	
Certificates/ approvals	-		-		
CSA	ccc		UL		
EMC	Functional Safety/Safety of Ma- chinery	Declaration of Cont	ormity	Test Certificates	
RCM	<u>Type Examination Cer-</u> <u>tificate</u>	UK CA	CE EG-Konf.	<u>Type Test Certific-</u> ates/Test Report	<u>Special Test Certific-</u> <u>ate</u>
Marine / Shipping					
ABS		Llovd's Register uis	PRS	RINA	RMRS
other	Railway	Dangerous Good	Environment		
Confirmation	Vibration and Shock	Transport Information	<u>Environmental Con-</u> <u>firmations</u>		

Further information Siemens has decided to exit the Russian market (see here). https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business Siemens is working on the renewal of the current EAC certificates. Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus). 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) om/mall/en/en/Catalog/product?mlfb=3RT2047-1AK60 https:// all.industry

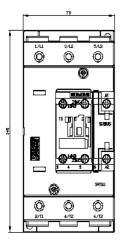
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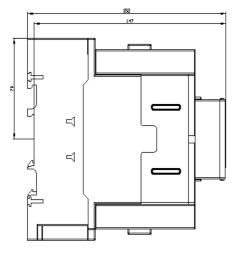
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http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2047-1AK60 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT2047-1AK60 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2047-1AK60&lang=en Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RT2047-1AK60/char

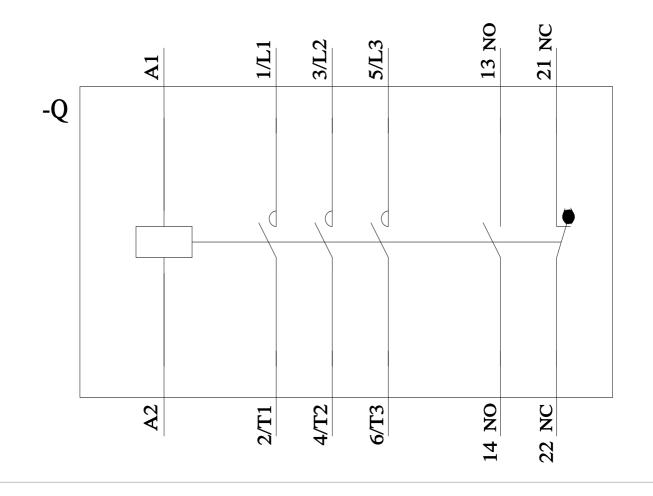
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2047-1AK60&objecttype=14&gridview=view1









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