Data sheet

3RT2017-1AP02-1AA0



power contactor, AC-3e/AC-3, 12 A, 5.5 kW / 400 V, 3-pole, 230 V AC, 50/60 Hz, auxiliary contacts: 1 NC, screw terminal, size: S00, upright mounting position

product type designation Power contactor SRT2 General technical data size of contactor S00 product extension Function module for communication No	product brand name	SIRIUS
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 • without load current share typical insulation voltage • of main circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit rated value • of auxiliary circuit rated value • of main circuit rated value • of auxiliary circuit rated value • of x of auxiliary circuit rated value • of x of auxiliary circuit rated value • of x of	product designation	Power contactor
size of contactor product extension • function module for communication • function module for communication • function module for communication • auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state per pole • without load current share typical • at AC in hot operating state per pole • without load current share typical insulation voltage • of main circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit rated value • of waxiliary circuit rated value • of auxiliary circuit rated value • of auxiliary circuit rated value • of auxiliary switch block typical • at AC 7,3g / 5 ms, 4,7g / 10 ms shock resistance with sine pulse • at AC 11,4g / 5 ms, 7,3g / 10 ms mechanical service life (operating cycles) • of contactor with added electronically optimized auxiliary switch block typical • of the contactor with added electronically optimized auxiliary switch block bypical • of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Qu Substance Prohibitance (Date) Ambient conditions installation attitude at height above sea level maximum ambient temperature • during operation • during storage relative humidity at 55 °C according to IEC 80068-2-30 maximum Main circuit	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 1.5 W • at AC in hot operating state 1.5 W • at AC in hot operating state per pole 0.5 W • without load current share typical 1.5 W insulation voltage • of main circuit with degree of pollution 3 rated value 690 V • of main circuit with degree of pollution 3 rated value 690 V • of main circuit rated value 6 kV maximum permissible voltage for protective separation between 60 kV maximum permissible voltage for protective separation between 400 V shock resistance at rectangular impulse 4 kV • at AC 7,3g / 5 ms, 4.7g / 10 ms shock resistance with sine pulse • at AC 11,4g / 5 ms, 7,3g / 10 ms mechanical service life (operating cycles) • of contactor typical 30 000 000 • of the contactor with added electronically optimized 30 000 000 auxiliary switch block typical 5 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 Ambient conditions 10 000 000 ambient temperature 4 during operation 25 +60 °C • during operation 25 +60 °C • during operation 25 +60 °C • during operation 25 +80 °C relative humidity at 55 °C according to IEC 60068-2-30 95 %	General technical data	
function module for communication Yes	size of contactor	S00
auxiliary switch power loss [W] for rated value of the current at AC in hot operating state at AC in hot operating state per pole without load current share typical at AC in hot operating state per pole without load current share typical 1.5 W insulation voltage of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of the value of auxiliary circuit rated value of auxiliary occurrent of auxiliary suntent between coil and main contacts according to EC 81346-2 Q Substance Prohibitance (Date) of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) of the contactions installation altitude at height above sea level maximum of ultimated auxiliary switch block typical of ultimated 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	product extension	
power loss [W] for rated value of the current at AC in hot operating state at AC in hot operating state prole without load current share typical insulation voltage of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit rated value of at AC rayg / 5 ms, 4,7g / 10 ms at AC shock resistance at rectangular impulse 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 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	 function module for communication 	No
at AC in hot operating state per pole without load current share typical insulation voltage of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of main circuit rated value of main circuit rated value of auxiliary circuit rated value of the contactor with auxiliary switch block typical of the contactor with added electronically optimized 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 auxiliary switch block typical of the contactor with added auxiliary switch block typical of the	auxiliary switch	Yes
at AC in hot operating state per pole without load current share typical insulation voltage of main circuit with degree of pollution 3 rated value of auxillary circuit with degree of pollution 3 rated value of auxillary circuit with degree of pollution 3 rated value of main circuit value of main circuit rated value of auxillary circuit rated value of aux	power loss [W] for rated value of the current	
insulation voltage of main circuit with degree of pollution 3 rated value of auxillary circuit with degree of pollution 3 rated value of auxillary circuit with degree of pollution 3 rated value surge voltage resistance of main circuit rated value of auxillary circuit rated value of auxillary circuit rated value of work of auxillary circuit rated value of work of auxillary circuit rated value of work of auxillary circuit rated value of kW of auxillary circuit rated value of kW of auxillary circuit rated value of work of auxillary circuit rated value of auxillary circuit rated value or auxillary and or auxillary impulse or at AC shock resistance at rectangular impulse or at AC shock resistance with sine pulse or at AC mechanical service life (operating cycles) of the contactor with added electronically optimized auxillary switch block typical of the contactor with added auxillary switch block typical reference code according to IEC 81346-2 Quuthstance Prohibitance (Date) or auxillation altitude at height above sea level maximum ambient temperature or during operation or auxillary during thin minum or auxillary minimum or auxillary minimum or auxillary circuit with degree of pollution 3 rated value 690 V 690 V 690 V 690 V 68V 6 kV 400 V 500 V 300 00 300 000 50	 at AC in hot operating state 	1.5 W
insulation voltage • of main circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of main circuit rated value • of main circuit rated value • of main circuit rated value • of auxiliary circuit rated value • of auxiliary circuit rated value maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse • at AC shock resistance with sine pulse • at AC shock resistance with sine pulse • at AC for contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage relative humidity minimum relative humidity minimum Main circuit Main circuit degree of pollution 3 rated value 680 V 690 V 690 V 690 V 690 V 690 V 400 V 60 kV 400 V 61 kV 400 V 61 kV 400 V 60 kV	 at AC in hot operating state per pole 	0.5 W
of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value surge voltage resistance of main circuit rated value of auxiliary circuit rated value of text of auxiliary circuit rated value of text of auxiliary circuit rated value of auxiliary circuit rated value of th Countacts according to EN 60947-1 shock resistance at rectangular impulse of th Countacts rectangular impulse of the contactor with sine pulse of the contactor 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 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	without load current share typical	1.5 W
of auxiliary circuit with degree of pollution 3 rated value of main circuit rated value of main circuit rated value of auxiliary circuit rated value of contactor typical 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 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 o	insulation voltage	
surge voltage resistance of main circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value in of auxiliary circuit rated value of auxiliary circuit rated value maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse of at AC shock resistance with sine pulse of contactor with sine pulse of contactor vitin added electronically optimized auxiliary switch block typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block t	 of main circuit with degree of pollution 3 rated value 	690 V
of main circuit rated value of auxiliary circuit rated value anximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse ot AC shock resistance with sine pulse ot AC shock resistance with sine pulse ot AC interpretation of the contactor typical of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch	of auxiliary circuit with degree of pollution 3 rated value	690 V
of auxiliary circuit rated value maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse ot AC shock resistance with sine pulse ot AC shock resistance with sine pulse ot AC interpretation of the contactor typical 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 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 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 typical of the contactor typical of the contactor typical of the contactor typical	surge voltage resistance	
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse • at AC shock resistance with sine pulse • at AC 11,4g / 5 ms, 7,3g / 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 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Amblent conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit	of main circuit rated value	6 kV
shock resistance at rectangular impulse • at AC shock resistance with sine pulse • at AC start AC • at AC • at AC • at AC • 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 reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum • during operation • during operation • during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit	of auxiliary circuit rated value	6 kV
* at AC * shock resistance with sine pulse * at AC * at AC * 11,4g / 5 ms, 7,3g / 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 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 * 10 000 000 ### Comparison ** 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 ** 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 ** 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 ** 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 ad		400 V
shock resistance with sine pulse • at AC 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 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 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 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 Main circuit	shock resistance at rectangular impulse	
at AC 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 reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation of during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit	• at AC	7,3g / 5 ms, 4,7g / 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 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature • during operation • during storage relative humidity minimum relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit	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	• at AC	11,4g / 5 ms, 7,3g / 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 reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature oduring operation during storage during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit 5 000 000 10 000 00 00 00 00 00 00	mechanical service life (operating cycles)	
auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit	 of contactor typical 	30 000 000
reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage -25 +60 °C • during storage relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit		5 000 000
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit	of the contactor with added auxiliary switch block typical	10 000 000
installation altitude at height above sea level maximum ambient temperature during operation during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit 2 000 m -25 +60 °C -25 +80 °C 10 % 95 %	reference code according to IEC 81346-2	Q
installation altitude at height above sea level maximum ambient temperature • during operation • during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit	Substance Prohibitance (Date)	10/01/2009
ambient temperature	Ambient conditions	
◆ during operation ◆ during storage ←55 +80 °C relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit -25 +60 °C -55 +80 °C 95 %	installation altitude at height above sea level maximum	2 000 m
● during storage relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit	ambient temperature	
relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit	during operation	-25 +60 °C
relative humidity at 55 °C according to IEC 60068-2-30 95 % maximum Main circuit	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

	3
operating voltage	
 at AC-3 rated value maximum 	690 V
at AC-3e rated value maximum	690 V
operational current	
 at AC-1 at 400 V at ambient temperature 40 °C rated 	22 A
value	
• at AC-1	
 up to 690 V at ambient temperature 40 °C rated value 	22 A
— up to 690 V at ambient temperature 60 °C rated	20 A
value	2077
• at AC-3	
— at 400 V rated value	12 A
— at 500 V rated value	9.2 A
— at 690 V rated value	6.7 A
• at AC-3e	
— at 400 V rated value	12 A
— at 500 V rated value	9.2 A
— at 690 V rated value	6.7 A
• at AC-4 at 400 V rated value	8.5 A
• at AC-5a up to 690 V rated value	19.4 A
at AC-5b up to 400 V rated value	9.9 A
• at AC-6a	
— up to 230 V for current peak value n=20 rated value	7.2 A
— up to 400 V for current peak value n=20 rated value	7.2 A
— up to 500 V for current peak value n=20 rated value	7.2 A
— up to 690 V for current peak value n=20 rated value	6.7 A
• at AC-6a	
— up to 230 V for current peak value n=30 rated value	4.8 A
— up to 400 V for current peak value n=30 rated value	4.8 A
— up to 500 V for current peak value n=30 rated value	4.8 A
— up to 690 V for current peak value n=30 rated value	4.8 A
· · · · · · · · · · · · · · · · · · ·	
minimum cross-section in main circuit at maximum AC-1 rated	4 mm²
value	4 mm²
	4 mm²
value operational current for approx. 200000 operating cycles at	4 mm² 4.1 A
value operational current for approx. 200000 operating cycles at AC-4	
value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value	4.1 A
value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value	4.1 A
value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operational current	4.1 A
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	4.1 A 3.3 A
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	4.1 A 3.3 A 20 A
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 60 V rated value	4.1 A 3.3 A 20 A 20 A
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 60 V rated value — at 110 V rated value	4.1 A 3.3 A 20 A 20 A 2.1 A
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 60 V rated value — at 110 V rated value — at 220 V rated value	4.1 A 3.3 A 20 A 20 A 2.1 A 0.8 A
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 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value	4.1 A 3.3 A 20 A 20 A 2.1 A 0.8 A 0.6 A
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 60 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 600 V rated value	4.1 A 3.3 A 20 A 20 A 2.1 A 0.8 A 0.6 A
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 60 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 • with 2 current paths in series at DC-1	4.1 A 3.3 A 20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A
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 60 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 600 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	4.1 A 3.3 A 20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A
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 60 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 60 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value	4.1 A 3.3 A 20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A
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 60 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 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value — at 60 V rated value — at 110 V rated value — at 110 V rated value	4.1 A 3.3 A 20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A
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 60 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 60 V rated value — at 110 V rated value — at 220 V rated value	4.1 A 3.3 A 20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 20 A 21 A 20 A
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 60 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 60 V rated value • at 10 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 20 V rated value — at 440 V rated value — at 600 V rated value — at 440 V rated value — at 440 V rated value — at 600 V rated value	4.1 A 3.3 A 20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A 21 A 20
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 60 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 24 V rated value — at 24 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value — at 440 V rated value — at 440 V rated value — at 440 V rated value — at 4600 V rated value — at 600 V rated value	4.1 A 3.3 A 20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A 2
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 600 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 60 V rated value — at 440 V rated value — at 60 V rated value — at 220 V rated value — at 60 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 600 V rated value	4.1 A 3.3 A 20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A 2
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 60 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 110 V rated value • at 20 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 10 V rated value — at 60 V rated value — at 100 V rated value — at 220 V rated value — at 220 V rated value — at 240 V rated value — at 240 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 • with 3 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value	4.1 A 3.3 A 20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A 2
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 60 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 60 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 • with 3 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value — at 60 V rated value — at 110 V rated value — at 110 V rated value	4.1 A 3.3 A 20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A 12 A 1.6 A 0.8 A 0.7 A
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 60 V rated value — at 110 V rated value — at 220 V rated value — at 600 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value — at 220 V rated value — at 24 V rated value — at 24 V rated value — at 600 V rated value — at 24 V rated value — at 24 V rated value — at 20 V rated value	4.1 A 3.3 A 20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A 2
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 60 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 60 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 • with 3 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value — at 60 V rated value — at 110 V rated value — at 110 V rated value	4.1 A 3.3 A 20 A 20 A 2.1 A 0.8 A 0.6 A 0.6 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A 12 A 1.6 A 0.8 A 0.7 A

— at 24 V rated value	20 A		
— at 60 V rated value	0.5 A		
— at 110 V rated value	0.15 A		
 with 2 current paths in series at DC-3 at DC-5 			
— at 24 V rated value	20 A		
— at 60 V rated value	5 A		
— at 110 V rated value	0.35 A		
 with 3 current paths in series at DC-3 at DC-5 			
— at 24 V rated value	20 A		
— at 60 V rated value	20 A		
— at 110 V rated value	20 A		
— at 220 V rated value	1.5 A		
— at 440 V rated value	0.2 A		
	0.2 A		
— at 600 V rated value	0.2 A		
operating power	5 5 12M		
at AC-2 at 400 V rated value	5.5 kW		
• at AC-3			
— at 230 V rated value	3 kW		
— at 400 V rated value	5.5 kW		
— at 500 V rated value	5.5 kW		
— at 690 V rated value	5.5 kW		
• at AC-3e			
— at 230 V rated value	3 kW		
— at 400 V rated value	5.5 kW		
— at 500 V rated value	5.5 kW		
— at 690 V rated value	5.5 kW		
operating power for approx. 200000 operating cycles at AC-			
4			
 at 400 V rated value 	2 kW		
at 690 V rated value	2.5 kW		
operating apparent power at AC-6a			
 up to 230 V for current peak value n=20 rated value 	2.8 kVA		
 up to 400 V for current peak value n=20 rated value 	4.9 kVA		
 up to 500 V for current peak value n=20 rated value 	6.2 kVA		
 up to 690 V for current peak value n=20 rated value 	8 kVA		
operating apparent power at AC-6a			
 up to 230 V for current peak value n=30 rated value 	1.9 kVA		
 up to 400 V for current peak value n=30 rated value 	3.3 kVA		
 up to 500 V for current peak value n=30 rated value 	4.1 kVA		
 up to 690 V for current peak value n=30 rated value 	5.7 kVA		
short-time withstand current in cold operating state up to			
40 °C			
 limited to 1 s switching at zero current maximum 	200 A; Use minimum cross-section acc. to AC-1 rated value		
 limited to 5 s switching at zero current maximum 	123 A; Use minimum cross-section acc. to AC-1 rated value		
 limited to 10 s switching at zero current maximum 	96 A; Use minimum cross-section acc. to AC-1 rated value		
• limited to 30 s switching at zero current maximum	74 A; Use minimum cross-section acc. to AC-1 rated value		
• limited to 60 s switching at zero current maximum	61 A; Use minimum cross-section acc. to AC-1 rated value		
no-load switching frequency			
• at AC	10 000 1/h		
operating frequency			
• at AC-1 maximum	1 000 1/h		
• at AC-2 maximum	750 1/h		
• at AC-3 maximum	750 1/h		
at AC-3e maximum	750 1/h		
at AC-4 maximum	250 1/h		
Control circuit/ Control	200 1111		
	AC.		
type of voltage of the control supply voltage	AC		
control supply voltage at AC	220 V		
at 50 Hz rated value	230 V		
at 60 Hz rated value	230 V		
operating range factor control supply voltage rated value of magnet coil at AC			

● at 50 Hz	0.8 1.1		
• at 60 Hz	0.85 1.1		
apparent pick-up power of magnet coil at AC			
● at 50 Hz	37 VA		
● at 60 Hz	33 VA		
inductive power factor with closing power of the coil			
● at 50 Hz	0.8		
● at 60 Hz	0.75		
apparent holding power of magnet coil at AC			
● at 50 Hz	5.7 VA		
● at 60 Hz	4.4 VA		
inductive power factor with the holding power of the coil			
● at 50 Hz	0.25		
● at 60 Hz	0.25		
closing delay			
• at AC	9 35 ms		
opening delay			
• at AC	4 15 ms		
arcing time	10 15 ms		
control version of the switch operating mechanism	Standard A1 - A2		
Auxiliary circuit			
number of NC contacts for auxiliary contacts instantaneous	1		
contact			
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			
full-load current (FLA) for 3-phase AC motor			
• at 480 V rated value	11 A		
• at 600 V rated value	11 A		
yielded mechanical performance [hp]			
• for single-phase AC motor			
— at 110/120 V rated value	0.5 hp		
— at 230 V rated value	2 hp		
• for 3-phase AC motor			
— at 200/208 V rated value	3 hp		
— at 220/230 V rated value	3 hp		
— at 460/480 V rated value	7.5 hp		
— at 575/600 V rated value	10 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: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)	
 — with type of assignment 2 required 	gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)	
for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)	
Installation/ mounting/ dimensions		
mounting position	standing, on horizontal 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	58 mm	
width	45 mm	
depth	73 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	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²	
solid or stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x 4 mm²	
finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	
connectable conductor cross-section for main contacts		
• solid	0.5 4 mm²	
• stranded	0.5 4 mm ²	
finely stranded with core end processing	0.5 2.5 mm²	
connectable conductor cross-section for auxiliary contacts		
solid or stranded	0.5 4 mm ²	
finely stranded with core end processing	0.5 2.5 mm²	
type of connectable conductor cross-sections		
for auxiliary contacts	0.4/0.5 4.5 mans?) 0.4/0.75 0.5 mars?) 0.4 4 mars?	
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²	
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	
for AWG cables for auxiliary contacts	2x (20 16), 2x (18 14), 2x 12	
AWG number as coded connectable conductor cross		
section		
section • for main contacts	20 12	
	20 12 20 12	
 for main contacts for auxiliary contacts		
for main contacts for auxiliary contacts Safety related data		
for main contacts for auxiliary contacts Safety related data product function	20 12	
for main contacts for auxiliary contacts Safety related data product function mirror contact according to IEC 60947-4-1	20 12 Yes	
for main contacts for auxiliary contacts Safety related data product function mirror contact according to IEC 60947-4-1 suitability for use safety-related switching OFF	20 12 Yes Yes	
for main contacts for auxiliary contacts Safety related data product function mirror contact according to IEC 60947-4-1	20 12 Yes	

 with high demand rate according to SN 31920 	73 %	
failure rate [FIT] with low demand rate according to SN 31920	100 FIT	
T1 value for proof test interval or service life according to IEC 61508	20 a	
protection class IP on the front according to IEC 60529	IP20	
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front	
0		

Certificates/ approvals

General Product Approval



Confirmation





<u>KC</u>



Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates
---------------------------------------	---------------------------	-------------------



Type Examination Certificate





Special Test Certificate

Type Test Certificates/Test Report

Marine / Shipping













Marine / Shipping other Railway Environment



Confirmation



Confirmation

Vibration and Shock

Environmental Confirmations

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)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2017-1AP02-1AA0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2017-1AP02-1AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-1AP02-1AA0

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

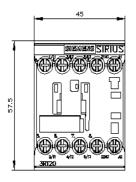
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2017-1AP02-1AA0&lang=en

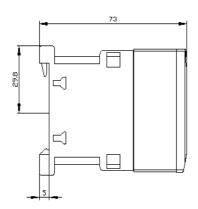
Characteristic: Tripping characteristics, I2t, Let-through current

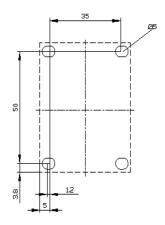
https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-1AP02-1AA0/char

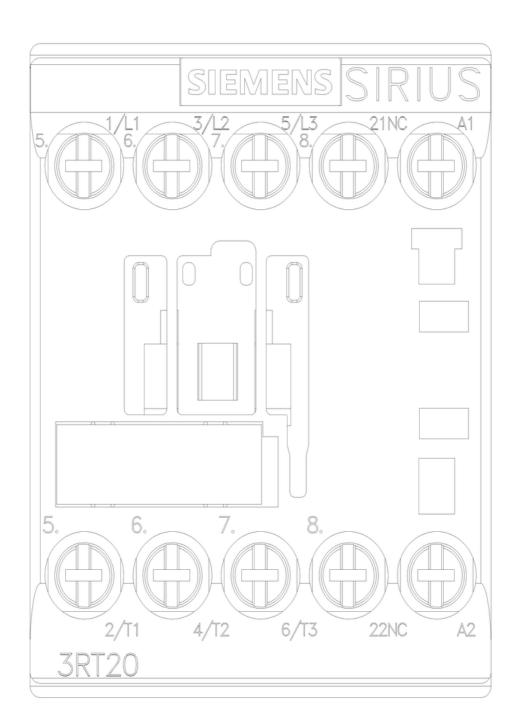
Further characteristics (e.g. electrical endurance, switching frequency)

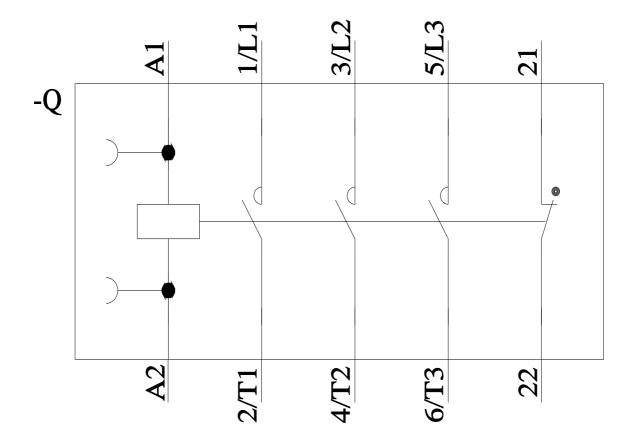
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2017-1AP02-1AA0&objecttype=14&gridview=view1











last modified: 8/15/2023 🖸

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Siemens:

3RT20171AP021AA0