SIEMENS

Data sheet

3RT2018-1AR62



power contactor, AC-3e/AC-3, 16 A, 7.5 kW / 400 V, 3-pole, 400 V AC, 50 Hz / 400-440 V, 60 Hz, auxiliary contacts: 1 NC, screw terminal, size: S00

product brand name SIRUS product designation Power contactor size of contactor S00 product stension No • auxilary switch Yes power loss [W] for rated value of the current 3 W • at AC in hot operating state 3 W • at AC in hot operating state per pole 1 W • of auxilary switch Yes • of auxilary circuit with degree of pollution 3 rated value 650 V • of auxilary circuit with degree of pollution 3 rated value 690 V • of auxilary circuit rated value 690 V • of auxilary circuit rated value 64 KV • of auxilary circuit rated value 64 KV • of auxilary circuit rated value 64 V • of auxilary circuit rated value 7.3g / 5 ms, 4.7g / 10 ms machine current stare bylical 30 000 000 • at AC 7.3g / 5 ms, 7.3g / 10 ms mechanical service liffe (operating cycles) 0 000 000		
product type designation 3RT2 General technical data	product brand name	SIRIUS
Contract tochnical data S00 size of contactor S00 product extension No • auxiliary switch Yes power loss [W] for rated value of the current • at AC in hot operating state 3 W • at AC in hot operating state 3 W • at AC in hot operating state 0 W • of main circuit with degree of pollution 3 rated value 690 V 690 V • of main circuit with degree of pollution 3 rated value 690 V 690 V • of main circuit with degree of pollution 3 rated value 690 V 68V • of main circuit rated value 6 kV 6 kV • of main circuit rated value 6 kV 6 kV • of auxiliary circuit rated value 6 kV 6 kV • of auxiliary circuit rated value 6 kV 6 kV • of auxiliary circuit rate value 6 kV 7.3g / 5 ms, 4.7g / 10 ms shock resistance at rectangular impulse - 30 000 000 • at AC 11.4g / 5 ms, 7.3g / 10 ms 5000 000 • of the contactor with added auxiliary switch block typical 5000 000 5000 000 • of the contactor with added auxiliary switch block typical 1000 000 76 the cont	product designation	Power contactor
size of contactor S00 product extension No • auxiliary switch Yes power loss [W] for rated value of the current 3 W • at AC in hot operating state per pole 1 W • without load current share typical 6.5 W insulation voltage 690 V • 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 with degree of pollution 3 rated value 690 V • of main circuit with degree of pollution 3 rated value 690 V • of main circuit with degree of pollution 3 rated value 64V • of main circuit with degree of pollution 3 rated value 64V • of main circuit with get the value 64V • of main circuit with degree of pollution 3 rated value 64V • of main circuit with degree of pollution 3 rated value 64V • of auxiliary circuit rated value 64V • of main circuit with added topic 7.3g / 5 ms, 4.7g / 10 ms shock resistance with sine pulse 11,4g / 5 ms, 7.3g / 10 ms mechanical service life (operating cycles) 30 000 000 • of the contactor with added electronically optimized 30 000 000 of the contactor with added electronically optimized 10 000 000 reference code acc	product type designation	3RT2
product extension No • function module for communication No • auxiliary switch Yes power loss [W] for rated value of the current 3 W • at AC in hot operating state 3 W • at AC in hot operating state pole 1 W • without load current share typical 6.5 W insulation voltage 690 V • of main circuit with degree of pollution 3 rated value 690 V • of analing vicruit with degree of pollution 3 rated value 690 V • of analing vicruit with degree of pollution 3 rated value 690 V • of analing vicruit with degree of pollution 3 rated value 680 V • of analing vicruit with degree of pollution 3 rated value 64 V • of analing vicruit rated value 6 kV • at AC 7.3g / 5 ms, 4.7g / 10 ms shock resistance at rectangular impulse 7.3g / 5 ms, 7.3g / 10 ms • at AC 11.4g / 5 ms, 7.3g / 10 ms machineal service life (operating cycles) 30 000 000 • of the contactor with added electronically optimized 30 000 000 efference code according to EC 81346-2 Q Qubistance Prohibitance (Date)	General technical data	
• function module for communication No • auxiliary switch Yes power loss [W] for rated value of the current at AC in hot operating state 3 W • at AC in hot operating state per pole 1 W	size of contactor	S00
• auxiliary switch Yes power loss [W] for rated value of the current 3 • at AC in hot operating state 3 • at AC in hot operating state per pole 1 • without load current share typical 6.5 • 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 690 V • of auxiliary circuit with degree of pollution 3 rated value 600 V surge voltage resistance 6kV • of auxiliary circuit with degree of pollution 3 rated value 600 V surge voltage resistance 6kV • of auxiliary circuit with degree of pollution 3 rated value 6kV • of auxiliary circuit rated value 6kV • of auxiliary circuit rated value 6kV maximum permissible voltage for protective separation between coll and main contacts according to EN 60947-1 400 V shock resistance at rectangular impulse 11,4g /5 ms, 7,3g / 10 ms • at AC 7,3g / 5 ms, 7,3g / 10 ms mechanical service life (operating cycles) 5000 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 switc	product extension	
power loss [W] for rated value of the current 3 • et AC in hot operating state per pole 1 • et MC in hot operating state per pole 1 • et MC in hot operating state per pole 1 • et MC in hot operating state per pole 1 • et MC in hot operating state per pole 1 • et MC in hot operating state per pole 6.5 • of main circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit rated value 6 kV • of main circuit rated value 6 kV • of main conduct rated value 6 kV • of auxiliary circuit rated value 6 kV • of auxiliary circuit rated value 6 kV • of auxiliary circuit rated value 6 kV • at AC 7.3g / 5 ms, 4.7g / 10 ms shock resistance at rectangular impulse 11.4g / 5 ms, 7.3g / 10 ms • at AC 11.4g / 5 ms, 7.3g / 10 ms mechanical service life (operating cycles) 00 0000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000	 function module for communication 	No
• at AC in hot operating state 3 W • at AC in hot operating state prole 1 W • without load current share typical 6.5 W insultation voltage 6.5 W • of main circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit rated value 6 kV • at AC 7.3g / 5 ms, 4.7g / 10 ms shock resistance with sine pulse • at AC • at AC 11.4g / 5 ms, 7.3g / 10 ms • of contactor typical 30 000 000 • of the contactor with added electronically optimized 30 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 <th>auxiliary switch</th> <th>Yes</th>	auxiliary switch	Yes
• at AC in hot operating state per pole 1 W • withbut load current share typical 6.5 W insulation voltage 6.5 W • of main circuit with degree of pollution 3 rated value 690 V • surge voltage resistance 600 V • of auxiliary circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit rated value 6 kV • at AC 7,3g / 5 ms, 4.7g / 10 ms • at AC 11,4g / 5 ms, 7.3g / 10 ms • at AC 11,4g / 5 ms, 7.3g / 10 ms • of contactor typical 30 000 000 • 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 <th>power loss [W] for rated value of the current</th> <th></th>	power loss [W] for rated value of the current	
• without load current share typical 6.5 W Insulation voltage 690 V • of auxiliary circuit with degree of pollution 3 rated value 690 V surge voltage resistance 690 V • of auxiliary circuit with degree of pollution 3 rated value 690 V surge voltage resistance 6 kV • of auxiliary circuit rated value 6 kV • at AC 7,3g / 5 ms, 4,7g / 10 ms • at AC 11,4g / 5 ms, 7,3g / 10 ms • of contactor tytical 30 000 000 • of the contactor with added electronically optimized 30 000 000 • 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) 2	 at AC in hot operating state 	3 W
Insulation voltage 690 V • of main circuit with degree of pollution 3 rated value 690 V surge voltage resistance 690 V • of main circuit rated value 6 kV • of auxiliary circuit rated value 6 kV maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 400 V shock resistance at rectangular impulse 7,3g / 5 ms, 4,7g / 10 ms • at AC 7,3g / 5 ms, 7,3g / 10 ms mechanical service life (operating cycles) 30 000 000 • of 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) 10/01/2009 Ambient temperature - • during operation -25 +60 °C • during storage -55 +80 °C relative humidity minimum 10 % relative humidity minimum 10 %	 at AC in hot operating state per pole 	1 W
• of main circuit with degree of pollution 3 rated value 690 V • of auxiliary circuit with degree of pollution 3 rated value 690 V surge voltage resistance 6 • of main circuit rated value 6 kV maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 400 V shock resistance at rectangular impulse 6 • at AC 7,3g / 5 ms, 4,7g / 10 ms shock resistance with sine pulse 11,4g / 5 ms, 7,3g / 10 ms • at AC 11,4g / 5 ms, 7,3g / 10 ms mechanical service life (operating cycles) 30 000 000 • 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) 10/01/2009 Ambient conditions -25 +60 °C • during speration -25 +60 °C • during storage -55 +80 °C • during storage -55 +80 °C • relative humidity at 55 °C according to IEC 60068-2-30 95 % Main circuit 95 % <th> without load current share typical </th> <th>6.5 W</th>	 without load current share typical 	6.5 W
• of auxiliary circuit with degree of pollution 3 rated value 690 V surge voltage resistance 6 kV • of main circuit rated value 6 kV • of auxiliary circuit rated value 6 kV maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 400 V shock resistance at rectangular impulse 400 V • at AC 7,3g / 5 ms, 4,7g / 10 ms shock resistance with sine pulse 30 000 000 • of contactor typical 30 000 000 • of the contactor with added electronically optimized auxiliary witch block typical 5 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 Amblent conditions 2 000 m installation altitude at height above sea level maximum 2 000 m amblemit temperature -25 +60 °C • during operation -25 +60 °C • during strage -55 +80 °C relative humidity at 55 °C according to IEC 60068-2-30 maximum 95 %	insulation voltage	
surge voltage resistance 6 kV • of main circuit rated value 6 kV • of auxiliary circuit rated value 6 kV maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 400 V shock resistance at rectangular impulse 400 V • at AC 7,3g / 5 ms, 4,7g / 10 ms shock resistance with sine pulse 30 000 000 • of the contactor typical 30 000 000 • of the contactor with adde 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) 10/01/2009 Ambient conditions -25 +60 °C • during operation -25 +60 °C • during storage -55 +80 °C relative humidity minum 10 % 95 % 95 %	 of main circuit with degree of pollution 3 rated value 	690 V
• of main circuit rated value 6 kV • of auxiliary circuit rated value 6 kV maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 400 V shock resistance at rectangular impulse 400 V • 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 the contactor typical 30 000 000 • 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) 10/01/2009 Ambient conditions -25 +60 °C • during operation -25 +80 °C • during storage -55 +80 °C relative humidity minimum 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 60947-1 400 V shock resistance at rectangular impulse 400 V • at AC 7,3g / 5 ms, 4,7g / 10 ms 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 5 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 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 % 95 % Main circuit 95 %	surge voltage resistance	
maximum permissible voltage for protective separation between 400 V coil and main contacts according to EN 60947-1 400 V shock resistance at rectangular impulse 7,3g / 5 ms, 4,7g / 10 ms • at AC 7,3g / 5 ms, 7,3g / 10 ms shock resistance with sine pulse 11,4g / 5 ms, 7,3g / 10 ms • of AC 11,4g / 5 ms, 7,3g / 10 ms mechanical service life (operating cycles) 30 000 000 • 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) 10/01/2009 Amblent conditions 2 000 m installation altitude at height above sea level maximum 2 000 m amblent temperature -25 +60 °C • during operation -25 +80 °C relative humidity minimum 10 % 95 % 95 %	 of main circuit rated value 	6 kV
coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse • 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 • 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 is according to IEC 81346-2 Q Substance Prohibitance (Date) 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 7,3g / 5 ms, 4,7g / 10 ms shock resistance with sine pulse 11,4g / 5 ms, 7,3g / 10 ms • at AC 11,4g / 5 ms, 7,3g / 10 ms mechanical service life (operating cycles) 30 000 000 • of contactor typical 30 000 000 • 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) 10/01/2009 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		400 V
shock resistance with sine pulse intiger time, mg gr time • at AC 11,4g / 5 ms, 7,3g / 10 ms mechanical service life (operating cycles) 30 000 000 • of contactor typical 30 000 000 • 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) 10/01/2009 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	shock resistance at rectangular impulse	
• at AC 11,4g / 5 ms, 7,3g / 10 ms mechanical service life (operating cycles) 30 000 000 • of contactor typical 30 000 000 • 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) 10/01/2009 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 relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 95 % Main circuit Main circuit	• at AC	7,3g / 5 ms, 4,7g / 10 ms
mechanical service life (operating cycles) 30 000 000 • of contactor typical 30 000 000 • of the contactor with added electronically optimized auxiliary switch block typical 5 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 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 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 (Date) of the contact	• at AC	11,4g / 5 ms, 7,3g / 10 ms
• of the contactor with added electronically optimized auxiliary switch block typical 5 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 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 maximum 95 %	mechanical service life (operating cycles)	
auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 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 95 %	 of contactor typical 	30 000 000
reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 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
Substance Prohibitance (Date) 10/01/2009 Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature 0 00 m -25 +60 °C • during operation -25 +60 °C -55 +80 °C relative humidity minimum 10 % 95 % Main circuit Main circuit 95 %	 of the contactor with added auxiliary switch block typical 	10 000 000
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 -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	Substance Prohibitance (Date)	10/01/2009
ambient temperature • during operation • during storage -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	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 maximum 95 % 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 maximum 95 % Main circuit 10 %	during operation	-25 +60 °C
relative humidity at 55 °C according to IEC 60068-2-30 95 % 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

number of NO contacts for main contacts	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	
• at AC-3	
— at 400 V rated value	16 A
— at 500 V rated value	12.4 A
— at 690 V rated value	8.9 A
• at AC-3e	
— at 400 V rated value	16 A
— at 500 V rated value	12.4 A
— at 690 V rated value	8.9 A
• at AC-4 at 400 V rated value	11.5 A
• at AC-5a up to 690 V rated value	19.4 A
at AC-5b up to 400 V rated value	13.2 A
• at AC-6a	
 — up to 230 V for current peak value n=20 rated value 	9.6 A
 — up to 400 V for current peak value n=20 rated value 	9.6 A
 — up to 500 V for current peak value n=20 rated value 	9.6 A
— up to 690 V for current peak value n=20 rated value	8.9 A
• at AC-6a	
— up to 230 V for current peak value n=30 rated value	6.6 A
— up to 400 V for current peak value n=30 rated value	6.4 A
— up to 500 V for current peak value n=30 rated value	6.4 A
— up to 690 V for current peak value n=30 rated value	6.4 A
minimum cross-section in main circuit at maximum AC-1 rated value	4 mm ²
operational current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	5.5 A
• at 690 V rated value	4.4 A
operational current	
 at 1 current path at DC-1 	
— at 24 V rated value	20 A
— at 60 V rated value	20 A
— at 110 V rated value	2.1 A
— at 220 V rated value	0.8 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.6 A
 with 2 current paths in series at DC-1 	
— at 24 V rated value	20 A
— at 60 V rated value	20 A
— at 110 V rated value	12 A
— at 220 V rated value	1.6 A
— at 440 V rated value	0.8 A
— at 600 V rated value	0.7 A
 with 3 current paths in series at DC-1 	
— 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	20 A
— at 440 V rated value	1.3 A
— at 600 V rated value	1 A
 at 1 current path at DC-3 at DC-5 	

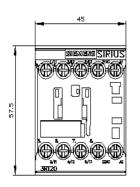
— at 24 V rated value	20 A
— at 60 V rated value	0.5 A
— at 110 V rated value	0.15 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	20 A
— at 60 V rated value	5 A
— at 110 V rated value	0.35 A
 with 3 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	20 A
— at 60 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
— at 600 V rated value	0.2 A
operating power	
• at AC-3	
— at 230 V rated value	4 kW
— at 400 V rated value	7.5 kW
— at 500 V rated value	7.5 kW
— at 690 V rated value	7.5 kW
• at AC-3e	
— at 230 V rated value	4 kW
— at 400 V rated value	7.5 kW
— at 500 V rated value	7.5 kW
— at 690 V rated value	7.5 kW
operating power for approx. 200000 operating cycles at AC-	
4	
• at 400 V rated value	2.5 kW
• at 690 V rated value	3.5 kW
operating apparent power at AC-6a	
 up to 230 V for current peak value n=20 rated value 	3.8 kVA
• up to 400 V for current peak value n=20 rated value	6.6 kVA
 up to 500 V for current peak value n=20 rated value 	8.3 kVA
 up to 690 V for current peak value n=20 rated value 	10.6 kVA
operating apparent power at AC-6a	
• up to 230 V for current peak value n=30 rated value	2.5 kVA
 up to 400 V for current peak value n=30 rated value 	4.4 kVA
• up to 500 V for current peak value n=30 rated value	5.5 kVA
• up to 690 V for current peak value n=30 rated value	7.6 kVA
short-time withstand current in cold operating state up to	
40 °C	
 limited to 1 s switching at zero current maximum 	300 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	169 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	128 A; Use minimum cross-section acc. to AC-1 rated value
• limited to 30 s switching at zero current maximum	92 A; Use minimum cross-section acc. to AC-1 rated value
• limited to 60 s switching at zero current maximum	74 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	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
• at 50 Hz rated value	400 V
at 60 Hz rated value	400 V 440 V
operating range factor control supply voltage rated value of magnet coil at AC	
• at 50 Hz	0.8 1.1

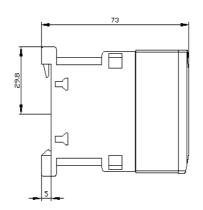
• at 60 Hz	0.85 1.1				
apparent pick-up power of magnet coil at AC					
• at 50 Hz	36 VA				
• at 60 Hz	43 VA				
inductive power factor with closing power of the coil					
• at 50 Hz	0.8				
• at 60 Hz	0.8				
apparent holding power of magnet coil at AC					
• at 50 Hz	5.9 VA				
• at 60 Hz	6.5 VA				
inductive power factor with the holding power of the coil					
• at 50 Hz	0.24				
• 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 contact	1				
operational current at AC-12 maximum	10 A				
operational current at AC-15					
• at 230 V rated value	10 A				
• at 400 V rated value	3 A				
• at 500 V rated value	2 A				
• at 690 V rated value	1 A				
operational current at DC-12					
• at 24 V rated value	10 A				
• at 48 V rated value	6 A				
• at 60 V rated value	6 A				
• at 110 V rated value	3 A				
• at 125 V rated value	2 A				
• at 220 V rated value	1 A				
• at 600 V rated value	0.15 A				
operational current at DC-13					
at 24 V rated value	10 A				
• at 48 V rated value	2 A				
• at 60 V rated value	2 A				
• at 110 V rated value	1 A				
• at 125 V rated value	0.9 A				
• at 220 V rated value	0.3 A				
• at 600 V rated value	0.1 A				
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)				
UL/CSA ratings					
full-load current (FLA) for 3-phase AC motor					
• at 480 V rated value	14 A				
• at 600 V rated value	11 A				
yielded mechanical performance [hp]					
 for single-phase AC motor 					
— at 110/120 V rated value	1 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	5 hp				
— at 460/480 V rated value	10 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					

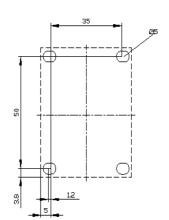
• for short-circuit protection of the main circuit				
- with type of coordination 1 required	gG: 50A (690V,100kA), aM: 25A (690V,100kA), BS88: 50A (415V,80kA)			
- with type of assignment 2 required	gG: 25A (690V,100kA), aM: 20A (690V,100kA), BS88: 25A (415V,80kA)			
 for short-circuit protection of 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 Yes			
side-by-side mounting 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 mm ²), 2x (0.75 2.5 mm ²), 2x 4 mm ²			
solid or stranded	2x (0,5 1,5 mm ²), 2x (0,75 2,5 mm ²), 2x 4 mm ²			
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	0.5 4 mm²			
solid strandod	0.5 4 mm ²			
stranded finally stranded with core and processing	0.5 4 mm ²			
finely stranded with core end processing connectable conductor cross-section for auxiliary contacts	0.5 2.5 mm²			
solid or stranded	0.5 4 mm²			
 finely stranded with core end processing 	0.5 2.5 mm ²			
type of connectable conductor cross-sections				
for auxiliary contacts				
— 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				
● for main contacts	20 12			
 for auxiliary contacts 	20 12			
Safety related data				
product function				
 mirror contact according to IEC 60947-4-1 	Yes			
B10 value with high demand rate according to SN 31920	1 000 000			
proportion of dangerous failures				
with low demand rate according to SN 31920	40 %			
 with high demand rate according to SN 31920 	73 %			

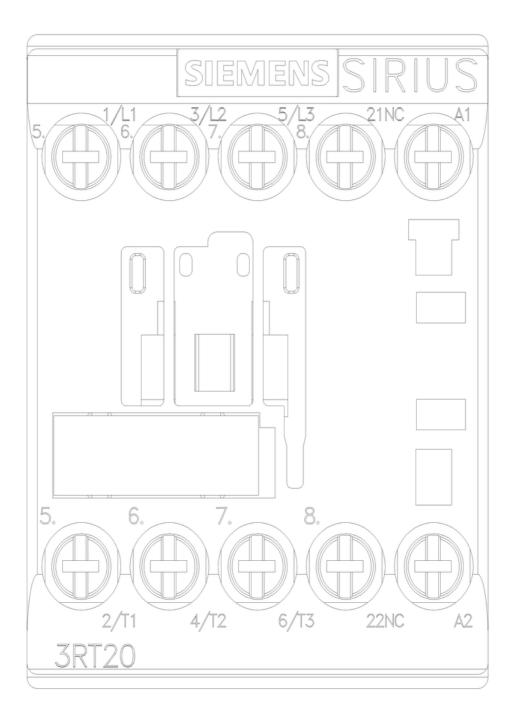
failure rate [FIT] with lo	ow demand rate according	to SN 31920	100 FIT			
T1 value for proof test interval or service life according to IEC 61508		20 a				
protection class IP on the front according to IEC 60529		IP20				
touch protection on t	the front according to IEC	60529	finger-safe	e, for vertical contac	t from the front	
suitability for use						
 safety-related system 			Yes			
Certificates/ approvals						
General Product App	proval					
		<u>Confirmatio</u>	n	(UL)	KC	EHC
EMC	Functional Safety/Safety of Ma- chinery	Declaration of	Conformity		Test Certificates	
	Type Examination Cer- tificate	CE EG-Konf.		UK CA	<u>Special Test Certific-</u> <u>ate</u>	Type Test Certific- ates/Test Report
Marine / Shipping						
ABS	BUREAU VERITAS			Hovd's Register uis	PRS	RINA
Marine / Shipping	other				Railway	Environment
KMRS RMRS	<u>Confirmation</u>	UDE VDE	•	Confirmation	Vibration and Shock	Environmental Con- firmations
Further information						

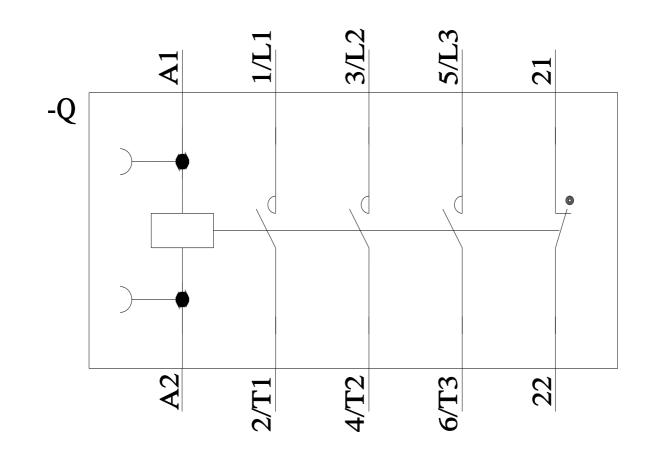
Siemens has decided to exit the Russian market (see here). https://pre /global/en/pressrelease/si wn-russian-business Siemens is working on the renewal of the current EAC certificates. Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import 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=3RT2018-1AR62 Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2018-1AR62 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT2018-1AR62 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2018-1AR62&lang=en Characteristic: Tripping characteristics, I2t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RT2018-1AR62/char Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2018-1AR62&objecttype=14&gridview=view1











last modified:

2/10/2023 🖸