SIEMENS

Data sheet

3RT2038-1AG20



power contactor, AC-3e/AC-3, 80 A, 37 kW / 400 V, 3-pole, 110 V AC, 50/60 Hz, auxiliary contacts: 1 NO + 1 NC, screw terminal, size: S2 $\,$

product brand name SIRIUS product designation Power contactor product type designation SRT2 canaral tachnical data S2 product stansion No • function module for communication No • auxiliary switch Yes power loss [W] for rated value of the current * • at AC in hot operating state 17.1 W • at AC in hot operating state per pole 5.7 W • without load current share typical 6.5 W insultation voitage 690 V • 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 auxiliary circuit rated value 70 V • at AC 11.8g / 5 ms, 7.4g / 10 ms mechanical	K/H	
product type designation 3RT2 Genoral tachnical data	product brand name	SIRIUS
General technical data S2 product extension No • function module for communication No • auxiliary switch Yes power loss [W] for rated value of the current • at AC in hot operating state 17.1 W • at AC in hot operating state 7.7 W • without load current share typical 65.7 W • 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 auxiliary circuit with degree of pollution 3 rated value 64V • of main circuit rated value 64V • of auxiliary circuit with degree of pollution 3 rated value 64V • of auxiliary circuit rated value 64V • at AC 11.8g / 5 ms, 7.4g / 10 ms mechanical service life (operating cycles) 10 000 000 • of the contactor with added auxiliary switch block typical 10000 000 • of the contactor with added auxiliary switch block typical 10000 000 • of the contactor with added auxiliary switch block typical 10000 000 • of the contactor with added auxiliary switch block typical 1000/100 • of the contactor w	product designation	Power contactor
size of contactor §2 product extension No • function module for communication No • auxilary switch Yes power loss [W] for rated value of the current 17.1 W • at AC in hot operating state per pole 5.7 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 auxillary circuit ated value 64 V • of main circuit with degree of pollution 3 rated value 690 V • of main circuit rated value 64 V • of auxillary circuit rated value 64 V • of auxillary circuit rated value 64 V • of auxillary circuit rated value 64 V • at AC 11.8g / 5 ms, 7.4g / 10 ms shock resistance withs ine pulse 11.8g / 5 ms, 7.4g / 10 ms • at AC 18.5g / 5 ms, 11.6g / 10 ms mechanical service Iffe (operating cycles) 10 000 000 • of the contactor with added electronically optimized 1000 000 • of the contactor with added electron	product type designation	3RT2
product extension No • function module for communication No • auxiliary switch Yes power loss [W] for rated value of the current 17.1 W • at AC in hot operating state 17.1 W • at AC in hot operating state prole 5.7 W • without load current share typical 8.5 W insulation voltage 690 V • of main circuit with degree of pollution 3 rated value 690 V • of analizing vicruit with degree of pollution 3 rated value 690 V • of analizing vicruit with degree of pollution 3 rated value 690 V • of analizing vicruit rated value 6 kV • of main circuit rated value 6 kV • of analizing vicruit rated value 11.8g / 5 ms, 7.4g / 10 ms shock resistance at rectangular impulse 11.8g / 5 ms, 7.4g / 10 ms • at AC 18.5g / 5 ms, 11.6g / 10 ms mechanical service life (operating cycles) 10 000 000 • of the contractor with added electronically optimized auxiliary switch block typical 10 000 000 reference	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 17.1 W • at AC in hot operating state per pole 5.7 W • without load current share typical 6.5 W insultation 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 64 kV • of main circuit rated value 6 kV • of main circuit rated value 6 kV • of auxiliary circuit rated value 18 kV • of auxiliary circuit rated value 6 kV • at AC 11.8g / 5 ms, 7.4g / 10 ms shock resistance with sine pulse 11.8g / 5 ms, 11.6g / 10 ms • at AC 18.5g / 5 ms, 11.6g / 10 ms mechanical service life (operating cycles) 10 000 000 • of the contactor which added auxiliary switch block typical 10 000 000 • of the contactor whicked auxiliary switch block typical	size of contactor	S2
• auxiliary switch Yes power loss [W] for ated value of the current 17.1 W • at AC in hot operating state 17.1 W • at AC in hot operating state per pole 5.7 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 rated value 690 V • of main circuit rated value 64 V • of auxiliary circuit with degree of pollution 3 rated value 600 V • of auxiliary circuit with degree of pollution 3 rated value 64 V • of auxiliary circuit rated value 64 V • of auxiliary circuit rated value 64 V • of auxiliary circuit rated value 64 V • at AC 11.8g / 5 ms, 7.4g / 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 conta	product extension	
power loss [W] for rated value of the current 11 • at AC in hot operating state prole 5.7 W • without load current share typical 6.5 W insulation 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 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 11.8g / 5 ms, 7.4g / 10 ms shock resistance with sine pulse 11.8g / 5 ms, 7.4g / 10 ms • at AC 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 10/00 /////////////////////////////////	 function module for communication 	No
• at AC in hot operating state 17.1 W • at AC in hot operating state per pole 5.7 W • without load current share typical 6.5 W insultation voltage 6.9 W • 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 680 V • of main circuit rated value 6 kV • of auxiliary circuit rated value 6 kV • at AC 11.8g / 5 ms, 7.4g / 10 ms shock resistance at rectangular impulse 10 000 000 • at AC 18.5g / 5 ms, 11.6g / 10 ms mechanical service life (operating cycles) 10 000 000 • of the contactor with added electronically optimized 2000 00 • auxiliary switch block typical 10 000 000	auxiliary switch	Yes
• at AC in hot operating state per pole 5.7 W • without load current share typical 6.5 W insulation voltage 6.5 W • 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 6 kV • of main circuit with degree of pollution 3 rated value 6 kV • of main circuit with degree of pollution 3 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 11.8g / 5 ms, 7.4g / 10 ms • at AC 18.5g / 5 ms, 11.6g / 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 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 00	power loss [W] for rated value of the current	
• without load current share typical 6.5 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 • auxinum premissible 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 11.8g / 5 ms, 7.4g / 10 ms shock resistance with sine pulse 10 8.5g / 5 ms, 11.6g / 10 ms • of contactor lytical 10 000 000 • of the contactor with added electronically optimized 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) 1001/2014 Ambient conditions -25 +60 °C <	 at AC in hot operating state 	17.1 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 • at AC 11.8g / 5 ms, 7.4g / 10 ms shock resistance with sine pulse 18.5g / 5 ms, 11.6g / 10 ms • at AC 18.5g / 5 ms, 11.6g / 10 ms mechanical service life (operating cycles) 10 000 000 • of the contactor with added electronically optimized 5 000 000 auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2014 Ambient temperature - • during storage -25 +60 °C • during storage -25 +60 °C • during storage -25 +	 at AC in hot operating state per pole 	5.7 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 400 V • at AC 11.8g / 5 ms, 7.4g / 10 ms shock resistance with sine pulse 10 000 000 • at AC 18.5g / 5 ms, 11.6g / 10 ms mechanical service life (operating cycles) 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) 10/01/2014 Ambient conditions -25 +60 °C • during operation -25 +60 °C • during storage -55 +60 °C • during storage -55 +60 °C • faltive 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 • of auxiliary circuit rated value 6 kV • of auxiliary circuit rated value 6 kV maximum permissible voltage for protective separation between 400 V coll and main contacts according to EN 60947-1 400 V shock resistance at rectangular impulse 400 V • at AC 11.8g / 5 ms, 7.4g / 10 ms shock resistance with sine pulse 11.8g / 5 ms, 7.4g / 10 ms • at AC 18.5g / 5 ms, 11.6g / 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 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2014 Ambient conditions 2000 m installation altitude at height above sea level maximum 2000 m ambient temperature -25 +60 °C	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 11.8g / 5 ms, 7.4g / 10 ms shock resistance with sine pulse 11.8g / 5 ms, 7.4g / 10 ms • at AC 18.5g / 5 ms, 11.6g / 10 ms mechanical service life (operating cycles) 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) 10/01/2014 Ambient conditions -25 +60 °C installation altitude at height above sea level maximum 2 000 m ambient temperature -55 +80 °C • during operation -25 +60 °C • during storage -55 +80 °C relative humidity at 55 °C according to IEC 60068-2-30 95 % Main circuit Main circuit	 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 11.8g / 5 ms, 7.4g / 10 ms shock resistance with sine pulse 11.8g / 5 ms, 7.4g / 10 ms • at AC 18.5g / 5 ms, 11.6g / 10 ms mechanical service life (operating cycles) 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) 10/01/2014 Ambient conditions 2 000 m ambient temperature -25 +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 60947-1 400 V shock resistance at rectangular impulse 400 V • at AC 11.8g / 5 ms, 7.4g / 10 ms shock resistance with sine pulse • • at AC 18.5g / 5 ms, 11.6g / 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) 10/01/2014 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 at 55 °C according to IEC 60068-2-30 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 400 V • at AC 11.8g / 5 ms, 7.4g / 10 ms shock resistance with sine pulse 11.8g / 5 ms, 7.4g / 10 ms • at AC 18.5g / 5 ms, 11.6g / 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 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) 10/01/2014 Ambient conditions 2 000 m installation altitude at height above sea level maximum 2 000 m ambient temperature -55 +60 °C • during operation -25 +60 °C • during storage -55 +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 11.8g / 5 ms, 7.4g / 10 ms shock resistance with sine pulse 18.5g / 5 ms, 11.6g / 10 ms • at AC 18.5g / 5 ms, 11.6g / 10 ms mechanical service life (operating cycles) 0 000 000 • of contactor typical 5 000 000 • 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) 10/01/2014 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	 of auxiliary circuit rated value 	6 kV
• at AC 11.8g / 5 ms, 7.4g / 10 ms shock resistance with sine pulse 18.5g / 5 ms, 11.6g / 10 ms • at AC 18.5g / 5 ms, 11.6g / 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) 10/01/2014 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 18.5g / 5 ms, 11.6g / 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) 10/01/2014 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 AC18.5g / 5 ms, 11.6g / 10 msmechanical service life (operating cycles)0• 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 000 000• 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)10/01/2014Ambient conditions2 000 minstallation altitude at height above sea level maximum2 000 mambient temperature-25 +60 °C• during operation-25 +60 °C• during storage-55 +80 °Crelative humidity minimum10 %Main circuítMain circuít	• at AC	11.8g / 5 ms, 7.4g / 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) 10/01/2014 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 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 the contactor typical of the contactor	• at AC	18.5g / 5 ms, 11.6g / 10 ms
 of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2014 Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature during operation -25 +60 °C etative 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) 10/01/2014 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) 10/01/2014 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) 10/01/2014 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 %	 of the contactor with added auxiliary switch block typical 	10 000 000
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 % 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 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)	10/01/2014
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 • during storage ·25 +60 °C ·55 +80 °C ·clative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum 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 % maximum 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	690 V
 at AC-3e rated value maximum 	690 V
operational current	
• at AC-1 at 400 V at ambient temperature 40 °C rated	90 A
value	
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	90 A
— up to 690 V at ambient temperature 60 °C rated	80 A
value	
• at AC-3	
— at 400 V rated value	80 A
— at 500 V rated value	80 A
— at 690 V rated value	58 A
• at AC-3e	
— at 400 V rated value	80 A
— at 500 V rated value	80 A
— at 690 V rated value	58 A
at AC-4 at 400 V rated value	55 A
at AC-5a up to 690 V rated value	79.2 A
 at AC-5b up to 400 V rated value at AC-6a 	66.4 A
	70 A
— up to 230 V for current peak value n=20 rated value	
 — up to 400 V for current peak value n=20 rated value — up to 500 V for current peak value n=20 rated value 	70 A 70 A
— up to 500 V for current peak value n=20 rated value	58 A
• at AC-6a	50 A
 up to 230 V for current peak value n=30 rated value 	46.7 A
— up to 200 V for current peak value n=30 rated value	46.7 A
— up to 500 V for current peak value n=30 rated value	46.7 A
— up to 690 V for current peak value n=30 rated value	46.7 A
minimum cross-section in main circuit at maximum AC-1 rated	35 mm ²
value	
operational current for approx. 200000 operating cycles at AC-4	
at 400 V rated value	30 A
at 690 V rated value	24 A
operational current	
• at 1 current path at DC-1	
— at 24 V rated value	55 A
— at 60 V rated value	23 A
— at 110 V rated value	4.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.4 A
— at 600 V rated value	0.25 A
• with 2 current paths in series at DC-1	
— at 24 V rated value	55 A
— at 60 V rated value	45 A
— at 110 V rated value	45 A
— at 220 V rated value	5 A
— at 440 V rated value	1 A
— at 600 V rated value	0.8 A
 with 3 current paths in series at DC-1 	
— at 24 V rated value	55 A
— at 60 V rated value	55 A
— at 110 V rated value	55 A
— at 220 V rated value	45 A
— at 440 V rated value	2.9 A
— at 600 V rated value	1.4 A
 at 1 current path at DC-3 at DC-5 	

— at 24 V rated value	35 A
— at 60 V rated value	6 A
— at 220 V rated value	1 A
— at 440 V rated value	0.1 A
— at 600 V rated value	0.06 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	55 A
— at 60 V rated value	45 A
— at 110 V rated value	25 A
— at 220 V rated value	5 A
— at 440 V rated value	0.27 A
— at 600 V rated value	0.16 A
 with 3 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	55 A
— at 60 V rated value	55 A
— at 110 V rated value	55 A
— at 220 V rated value	25 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.35 A
operating power	
at AC-2 at 400 V rated value	37 kW
• at AC-3	
- at 230 V rated value	22 kW
— at 200 V rated value	37 kW
	37 KW
- at 500 V rated value	
— at 690 V rated value	45 kW
• at AC-3e	
- at 230 V rated value	22 kW
— at 400 V rated value	37 kW
— at 500 V rated value	37 kW
— at 690 V rated value	45 kW
operating power for approx. 200000 operating cycles at AC- 4	
 at 400 V rated value 	15.8 kW
at 690 V rated value	21.8 kW
operating apparent power at AC-6a	
up to 230 V for current peak value n=20 rated value	27.8 kVA
• up to 400 V for current peak value n=20 rated value	48.4 kVA
• up to 500 V for current peak value n=20 rated value	60.6 kVA
	69.3 kVA
up to 690 V for current peak value n=20 rated value	00.0 KVA
operating apparent power at AC-6a	18.6 kV/A
up to 230 V for current peak value n=30 rated value	18.6 kVA
• up to 400 V for current peak value n=30 rated value	32.3 kVA
up to 500 V for current peak value n=30 rated value	40.4 kVA
up to 690 V for current peak value n=30 rated value	55.8 kVA
short-time withstand current in cold operating state up to 40 °C	
 limited to 1 s switching at zero current maximum 	1 298 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	898 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	640 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	414 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 60 s switching at zero current maximum 	333 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at AC	5 000 1/h
operating frequency	
at AC-1 maximum	700 1/h
	350 1/h
• at AC-2 maximum	
• at AC-3 maximum	500 1/h
at AC-3e maximum	500 1/h
at AC-4 maximum	150 1/h
Control circuit/ Control	

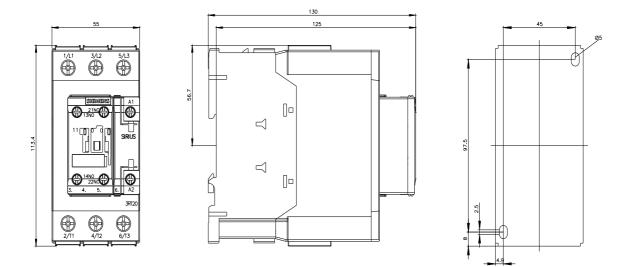
type of voltage of the control supply voltage	AC
control supply voltage at AC	
 at 50 Hz rated value 	110 V
• at 60 Hz rated value	110 V
operating range factor control supply voltage rated value of magnet coil at AC	
• at 50 Hz	0.8 1.1
• at 60 Hz	0.85 1.1
apparent pick-up power of magnet coil at AC	
• at 50 Hz	210 VA
• at 60 Hz	188 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.69
• at 60 Hz	0.65
apparent holding power of magnet coil at AC	
• at 50 Hz	17.2 VA
• at 60 Hz	16.5 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.36
• at 60 Hz	0.39
closing delay	
• at AC	10 80 ms
opening delay	
• at AC	10 18 ms
arcing time	10 20 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous	1
contact number of NO contacts for auxiliary contacts instantaneous	1
contact	
operational current at AC-12 maximum	10 A
operational current at AC-15	10.4
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	10.4
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 0.15 A
at 600 V rated value	0.15 A
operational current at DC-13	10.4
• 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	1A
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	65 A
• at 600 V rated value	62 A
yielded mechanical performance [hp]	
 for single-phase AC motor 	
— at 110/120 V rated value	5 hp

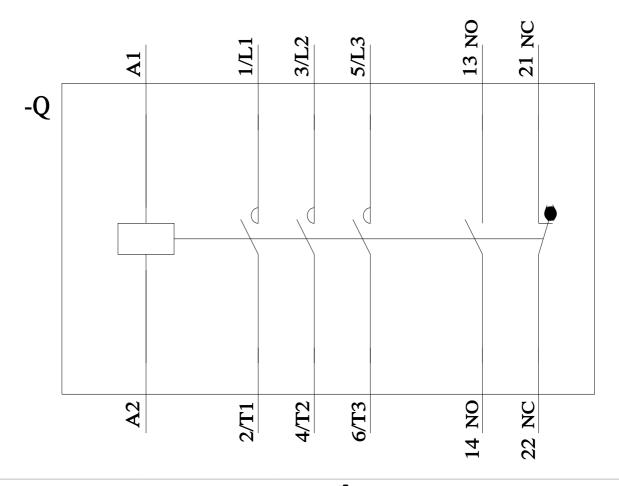
— at 230 V rated value	15 hp		
• for 3-phase AC motor			
— at 200/208 V rated value	20 hp		
— at 220/230 V rated value	25 hp		
— at 460/480 V rated value	50 hp		
— at 575/600 V rated value	60 hp		
contact rating of auxiliary contacts according to UL	A600 / P600		
Short-circuit protection			
design of 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: 160A (690V,100kA), aM: 80A (690V,100kA), BS88: 125A (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	114 mm		
width	55 mm		
depth	130 mm		
required spacing			
 with side-by-side mounting 			
— forwards	10 mm		
— upwards	10 mm		
— downwards	10 mm		
— at the side	0 mm		
 for grounded parts 			
— forwards	10 mm		
— upwards	10 mm		
— at the side	6 mm		
— downwards	10 mm		
• for live parts			
— forwards	10 mm		
— upwards	10 mm		
— downwards	10 mm		
— at the side	6 mm		
Connections/ Terminals			
type of electrical connection			
for main current circuit	screw-type terminals		
 for auxiliary and control circuit 	screw-type terminals		
 at contactor for auxiliary contacts 	Screw-type terminals		
 of magnet coil 	Screw-type terminals		
type of connectable conductor cross-sections for main contacts			
solid or stranded	2x (1 35 mm²), 1x (1 50 mm²)		
 finely stranded with core end processing 	2x (1 25 mm ²), 1x (1 35 mm ²)		
connectable conductor cross-section for main contacts			
 finely stranded with core end processing 	1 35 mm²		
connectable conductor cross-section for auxiliary contacts			
solid or stranded	0.5 2.5 mm²		
 finely stranded with core end processing 	0.5 2.5 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)		
— finely stranded with core end processing	2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²)		
 for AWG cables for auxiliary contacts 	2x (20 16), 2x (18 14)		
AWG number as coded connectable conductor cross section			
for main contacts	18 1		
for auxiliary contacts	20 14		
- TOT AUXILIARY COTTACTS			

afety related data							
product function							
	according to IEC 60947-4-1	Yes					
 positively driver 	n operation according to IEC	60947-5-1 No					
suitability for use safe	uitability for use safety-related switching OFF						
B10 value with high de	310 value with high demand rate according to SN 31920			Yes 1 000 000			
proportion of danger	rous failures						
 with low deman 	d rate according to SN 3192	0 40 9	%				
	with high demand rate according to SN 31920			73 %			
	ow demand rate according to		FIT				
	interval or service life accord						
61508			2				
protection class IP o	n the front according to IE	C 60529 IP2	0				
-	the front according to IEC		finger-safe, for vertical contact from the front				
ertificates/ approvals		J					
General Product Ap							
General Froduct Ap	provar						
	Confirmation		\sim	KC			
(36)		(\mathbf{m})	<i>(</i> Ui)	_	EDE		
<u>v</u>					гпі		
CSA		ccc	UL				
	Functional						
EMC	Safety/Safety of Ma-	Declaration of Confe	ormity	Test Certificates			
	chinery						
-							
	Type Examination Cer-	UK	~ ~	Special Test Certific-	Type Test Certific-		
- KA	<u>tificate</u>		(–	ate	ates/Test Report		
\sim							
1		<u>ٹ</u> گ	Lloyds	6			
1. St.		DNV	Register				
ABS	BUREAU	DNV	LRS	PRS	RINA		
	VERITAS						
Marine / Shipping	other		Railway	Dangerous Good	Environment		
indinio / empping			runnuy	Bungerede Good			
	Confirmation	Confirmation	Vibration and Shock	Transport Information	Environmental Con		
((*))					firmations		
RMRS							
Irther information							
	d to exit the Russian marke		asian husinasa				
	com/global/en/pressrelease/		ssian-dusiness				
	on the renewal of the curre ocal Siemens office on the sta		AC certification if you inten	d to import or offer to supr	bly these products to a		
	(other than the sanctioned E			,			
Information on the p							
	y.siemens.com/cs/ww/en/vie wnloadcenter (Catalogs, Bi						
https://www.siemens.c		oonures, <i>j</i>					
Industry Mall (Online	e ordering system)						
	emens.com/mall/en/en/Catal	og/product?mlfb=3RT2	2038-1AG20				
Cax online generator		rdor/dofeult.com/Qlass		0			
	ion.siemens.com/WW/CAXo anuals, Certificates, Chara		-enaminu=3R12038-1AG2	<u>v</u>			
	y.siemens.com/cs/ww/en/ps/						
Image database (pro	duct images, 2D dimension	n drawings, 3D mode	s, device circuit diagram	s, EPLAN macros,)			
	siemens.com/bilddb/cax_de		1AG20⟨=en				
	ing characteristics, I ² t, Let y.siemens.com/cs/ww/en/ps/						
	cs (e.g. electrical endurand		cv)				
		, <u> </u>					
				0 1	change without not		

8/17/2023

 $\underline{http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2038-1AG20\&objecttype=14&gridview=view1$





last modified:

8/15/2023 🖸

Subject to change without notice © Copyright Siemens

Mouser Electronics

Authorized Distributor

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

Siemens: 3RT20381AG20