SIEMENS

Data sheet 3RT2038-3AP00



Power contactor, AC-3 80 A, 37 kW / 400 V 1 NO + 1 NC, 230 V AC, 50 Hz 3-pole, size S2 Spring-type terminals

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S2
product extension	
 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 	16 W
insulation voltage	
 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	
 of main circuit rated value 	6 kV
of auxiliary circuit rated value	6 kV
maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• 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 (switching cycles)	
 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
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
during storage	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %

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 value	90 A
• 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 value 	80 A
• 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	66.4 A
• at AC-6a	00.471
— up to 230 V for current peak value n=20 rated value	70 A
— up to 400 V for current peak value n=20 rated value	70 A
 up to 500 V for current peak value n=20 rated value 	70 A
— up to 690 V for current peak value n=20 rated value	58 A
 at AC-6a up to 230 V for current peak value n=30 rated value 	46.7 A
— up to 400 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 value operational current for approx. 200000 operating	35 mm ²
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 110 V rated value	4.5 A
— at 220 V rated value	1A
— at 440 V rated value	0.4 A
— at 600 V rated value	0.25 A
	0.20 / 1
with 2 current paths in series at DC-1 at 24 V roted value.	EE A
— at 24 V rated value	55 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 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 110 V rated value	2.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.1 A
— at 600 V rated value	0.06 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	55 A
— at 110 V rated value	25 A
— at 220 V rated value	5 A
— at 440 V rated value	0.27 A
— at 600 V rated value	0.16 A
• with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value	55 A
— at 110 V rated value	55 A
— at 220 V rated value	25 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.35 A
operating power	0.00 A
	07 1344
at AC-2 at 400 V rated value	37 kW
• at AC-3	00.134
— 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
• 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
• up to 690 V for current peak value n=20 rated value	69.3 kVA
operating apparent power at AC-6a	,
• up to 230 V for current peak value n=30 rated value	18.6 kVA
 up to 250 V for current peak value n=30 rated value 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 about time withstand surrent in cold energting state.	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 1's switching at zero current maximum limited to 5's switching at zero current maximum	898 A; Use minimum cross-section acc. to AC-1 rated value
Ilimited to 10 s switching at zero current maximum Ilimited to 20 s switching at zero current maximum	640 A; Use minimum cross-section acc. to AC-1 rated value
Iimited to 30 s switching at zero current maximum	414 A; Use minimum cross-section acc. to AC-1 rated value
Iimited 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
• at AC-2 maximum	350 1/h

* At AC-3 maximum 500 thb * At AC-4 maximum 500 thb * At Control supply voltage at AC * At 60 thz tented value * Operating ranger factor control supply voltage rated value of magnet coil at AC * at 60 thz * at 60 thz * At 60 thz * At 60 thz * Sparant pick-typ power of magnet coil at AC * at 60 thz * At 60 thz * Sparant pick-typ power factor with closing power of the coil * at 60 thz * At AC * At C * At 60 thz * At AC * At C * At C	4400	T00 48
Ac A- maximum	• at AC-3 maximum	500 1/h
Section Sect		
ype of voltage of the control supply voltage control supply voltage at AC		150 1/h
control supply voltage at AC at 50 Hz trade value operating range factor control supply voltage rated value of magnet coil at AC at 50 Hz	Control circuit/ Control	
* at 50 Hz rated value operating angel factor control supply voltage rated value of magnet coll at AC * at 60 Hz apparent pick-up power of magnet coil at AC * at 60 Hz apparent pick-up power of magnet coil at AC * at 60 Hz apparent holding power of magnet coil at AC * at 50 Hz * at 50 Hz * at 50 Hz * at 50 Hz * at 60 Hz	type of voltage of the control supply voltage	AC
operation angle factor control supply voltage rated value of magnet coil at AC at 50 Hz apparent pick-up power of magnet coil at AC at 50 Hz inductive power factor with closing power of the coil at 50 Hz apparent holding power of magnet coil at AC at 50 Hz apparent holding power of magnet coil at AC at 50 Hz apparent holding power of magnet coil at AC at 50 Hz apparent holding power of magnet coil at AC at 50 Hz at 50 Hz closing delay at AC 10 80 ms and CO appaing delay at AC arcing time and CO ar	control supply voltage at AC	
value of magnet coil at AC a at 50 Hz apparent pick-up power famour coil at AC at 50 Hz inductive power factor with closing power of the coil at 50 Hz apparent holding power of magnet coil at AC at 50 Hz apparent holding power of magnet coil at AC at 50 Hz at 50 Hz at 50 Hz closing delay at AC at AC arcing time at AC arcing time 10 80 ms arcing time 10 80 ms arcing time 10 20 ms Standard A1 - A2 Availlary actions Availlary actions Availlary actions articular and a contact in a cont	 at 50 Hz rated value 	230 V
■ at 50 Hz apparent pick-up power of magnet coil at AC ■ at 50 Hz inductive power factor with closing power of the coil ■ at 50 Hz apparent holding power of magnet coil at AC ■ at 50 Hz inductive power factor with the holding power of the coil ■ at 50 Hz inductive power factor with the holding power of the coil ■ at 50 Hz closing delay ■ at AC		
apparent pick-up power of magnet coil at AC	value of magnet coil at AC	
Inductive power factor with closing power of the coil at 50 Hz		0.8 1.1
Inductive power factor with closing power of the coil ■ at 50 Hz ■ at 50 Hz ■ at 50 Hz Losing delay ■ at 4AC ■ at 50 Hz Opaning delay ■ at AC ■ at AC To possing delay ■ at AC Author over a consultance of the coil ■ at AC To possing delay ■ at AC ■ at AC To possing delay ■ at AC To possing delay ■ at AC ■ at AC To possing delay ■ at AC ■ at AC To possing delay ■ at AC To possing delay ■ at AC To possing delay ■ at AC ■ at AC To possing delay To possing delay ■ at AC To possing delay	apparent pick-up power of magnet coil at AC	
at 50 Hz apparent holding power of magnet coil at AC at 50 Hz inductive power factor with the holding power of the coil at 50 Hz o.37 closing delay at AC 10 80 ms opening delay at AC 10 80 ms opening delay at AC 10 18 ms arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum 10 A operational current at AC-12 maximum 10 A at 230 V rated value at 400 V rated value at 400 V rated value at 600 V rated value at 480 V rated value at 48 V rated value at 48 V rated value at 48 V rated value at 410 V rated value at 410 V rated value at 410 V rated value at 420 V rated value at 410 V rated value at 410 V rated value at 410 V rated value at 60 V rated value at 410 V rated value at 42 V rated value at 60 V rated value	● at 50 Hz	190 VA
apparent holding power of magnet coil at AC • at 50 Hz Inductive power factor with the holding power of the coil • at 50 Hz closing delay • at AC opening delay • at AC opening delay • at AC In 80 ms opening delay • at AC opening delay • at AC In 18 ms arcing time control version of the switch operating mechanism Auxiliary circuit Instantaneous contact Instanta	inductive power factor with closing power of the coil	
at 50 Hz 16 VA inductive power factor with the holding power of the coll oct 150 Hz o.37 oct 150 Hz oct 150		0.72
inductive power factor with the holding power of the coil at 50 Hz 0.37 closing delay 10 80 ms 0 pening delay 10 80 ms at AC 10 18 ms arcing time 10 20 ms control version of the switch operating mechanism Standard A1 - A2 Auxiliary decreated Auxiliary decreated 1 20 ms Image of NC contacts for auxiliary contacts 1 20 ms number of NC contacts for auxiliary contacts 1 14	apparent holding power of magnet coil at AC	
at 50 Hz 0.37 10 80 ms 10 80 ms 10 80 ms 10 80 ms 10 20 ms 1		16 VA
• at 50 Hz closing delay • at AC opening delay • at AC opening delay • at AC 10 18 ms arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 4500 V rated value • at 650 V rated value • at 450 V rated value • at 48 V rated value • at 48 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 220 V rated value • at 42 V rated value • at 450 V rated value • at 450 V rated value • at 46 V rated value • at 150 V rated value • at 10 V rated value • at 110 V rated value • at 24 V rated value • at 25 V rated value • at 20 V rated value • at 600 V rated val	•	
closing delay		0.07
• at AC opening delay • at AC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact 1 number of NC contacts for auxiliary contacts instantaneous contact 1 number of NC contacts for auxiliary contacts 1 number of NC contact for auxiliary contacts 1 no A at 230 V rated value at 24 V rated value at 24 V rated value at 25 V rated value at 25 V rated value at 24 V rated value at 25 V rated value at 26 V rated value at 27 A at 27 V rated value at 28 V rated value at 29 V rated value at 20 V rated value at 48 V rated value at 60 V rated val		0.37
Opening delay		4000
act AC 10 18 ms 10 20 ms 20 2		10 80 ms
arcing time		
Control version of the switch operating mechanism Standard A1 - A2		
Auxiliary circuit		
number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value • at 48 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 24 V rated value • at 25 V rated value • at 125 V rated value • at 25 V rated value • at 26 V rated value • at 27 V rated value • at 28 V rated value • at 29 V rated value • at 20 V rated value • at 30 V rated value • at 50 V rated value • at 125 V rated value • at 60 V rated value • at 48 V rated value • at 60 V rated value • at 10 V rated value • at 20 V rated value • at 30 V rated value • at 48 V rated value • at 48 V rated value • at 30 V rated value • at 48 V rated value • at 500 V rated value • at 600 V rated value • at 48 V rated value • at 600 V rated value • a		Standard A1 - A2
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 690 V rated value • at 800 V rated value • at 800 V rated value • at 100 V rated value • at 110 V rated value • at 125 V rated value • at 110 V rated value • at 120 V rated value • at 220 V rated value • at 600 V rated valu		
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operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 500 V rated value • at 690 V rated value • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 110 V rated value • at 1220 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 220 V rated value • at 220 V rated value • at 24 V rated value • at 25 V rated value • at 26 V rated value • at 27 V rated value • at 28 V rated value • at 29 V rated value • at 48 V rated value • at 48 V rated value • at 60 V rated value • at 60 V rated value • at 110 V rated value • at 120 V rated value • at 220 V rated value • at 220 V rated value • at 480 V rated value • at 600 V rated value • at 700 V rated value • at 110/120 V rated value • 5 A		1
• at 230 V rated value • at 400 V rated value • at 400 V rated value • at 690 V rated value • at 24 V rated value • at 24 V rated value • at 60 V rated value • at 60 V rated value • at 60 V rated value • at 110 V rated value • at 110 V rated value • at 110 V rated value • at 220 V rated value • at 220 V rated value • at 24 V rated value • at 60 V rated value • at 60 V rated value • at 80 V rated value • at 10 A • at 125 V rated value • at 20 V rated value • at 60 V rated value • at 60 V rated value • at 60 V rated value • at 10 A • at 110 V rated value • at 10 A • at 110 V rated value • at 24 V rated value • at 10 V rated value • at 125 V rated value • at 125 V rated value • at 10 V rated value • at 125 V rated value • at 126 V rated value • at 127 V rated value • at 128 V rated value • at 128 V rated value • at 20 V rated value • at 20 V rated value • at 48 V rated value • at 48 V rated value • at 600 V rated value • 5 A • at 600 V rated value • 5 A • at 600 V rated value • 5 A • at 600 V rated value • 5 A • at 600 V rated value • 5 A	operational current at AC-12 maximum	10 A
• at 400 V rated value • at 500 V rated value • at 690 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 48 V rated value • at 48 V rated value • at 48 V rated value • at 600 V rated value • at 80 V rated value • at 600 V rated value • at 80 V rated value • at 80 V rated value • at 80 V rated value • at 600 V rated value • 5 A • at 600 V rated value • at 70 V rated value • 5 A	operational current at AC-15	
• at 500 V rated value • at 690 V rated value 1 A operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 220 V rated value • at 600 V rated value • at 220 V rated value • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 60 V rated value • at 110 V rated value • at 110 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 33 A • at 220 V rated value • at 34 A V rated value • at 48 V rated value • at 48 V rated value • at 60 V rated value • 5 A • 5 A • 5 A • 5 B • 60 A • 60 A	at 230 V rated value	10 A
• at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 220 V rated value • at 24 V rated value • at 600 V rated value • at 24 V rated value • at 100 V rated value • at 25 V rated value • at 25 V rated value • at 260 V rated value • at 27 V rated value • at 28 V rated value • at 300 V rated value • at 48 V rated value • at 48 V rated value • at 600 V rated value • 5 pp	at 400 V rated value	3 A
Operational current at DC-12	at 500 V rated value	2 A
 at 24 V rated value at 48 V rated value at 6 A at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 220 V rated value at 600 V rated value at 600 V rated value at 24 V rated value at 24 V rated value at 48 V rated value at 60 V rated value at 60 V rated value at 10 V rated value at 110 V rated value at 125 V rated value at 125 V rated value at 220 V rated value at 200 V rated value at 600 V rated value at 600 V rated value at 480 V rated value at 65 A at 600 V rated value at 65 A at 600 V rated value at 65 A at 600 V rated value at 65 A at 600 V rated value at 70 Final Rule 	at 690 V rated value	1 A
 at 48 V rated value at 60 V rated value at 110 V rated value at 1125 V rated value at 220 V rated value at 600 V rated value at 600 V rated value at 24 V rated value at 24 V rated value at 24 V rated value at 48 V rated value at 60 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 65 A at 600 V rated value 5 hp 	operational current at DC-12	
 at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 600 V rated value on 2 A at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 125 V rated value at 220 V rated value at 3A at 600 V rated value 1A at 20 V rated value 1A at 300 V rated value 1A at 600 V rated value 1A at 600 V rated value 65 A at 600 V rated value 5 A at 600 V rated value 5 hp 	at 24 V rated value	10 A
 at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value 0.15 A operational current at DC-13 at 24 V rated value at 80 V rated value at 60 V rated value at 60 V rated value at 110 V rated value at 110 V rated value at 125 V rated value at 125 V rated value at 220 V rated value at 200 V rated value at 600 V rated value 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 at 600 V rated value at 70 Fabres AC motor at 100 V rated value 	at 48 V rated value	6 A
• at 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value contact reliability of auxiliary contacts UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • at 110 / 120 V rated value • for single-phase AC motor — at 110 / 120 V rated value 5 hp	at 60 V rated value	6 A
• at 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value contact reliability of auxiliary contacts UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • at 110 / 120 V rated value • for single-phase AC motor — at 110 / 120 V rated value 5 hp		
• at 220 V rated value • at 600 V rated value 0.15 A operational current at DC-13 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 60 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value 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 • 65 A • at 600 V rated value • 65 A • at 600 V rated value • 65 A • at 100 V rated value • 65 A • at 100 V rated value • 65 A • at 100 V rated value • 5 hp		
• at 600 V rated value operational current at DC-13 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value contact reliability of auxiliary contacts UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • at 100 V rated value • at 5 hp		
operational current at DC-13 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value Contact reliability of auxiliary contacts I 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 • at 600 V rated value • at 100 V rated value • at 600 V rated value • 5 A		
 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value o.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 at 600 V rated value 5 hp 		
 at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 600 V rated value at 600 V rated value at 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 at 600 V rated value at 110/120 V rated value 5 hp 	•	10 A
 at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 600 V rated value 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 at 600 V rated value at 600 V rated value for single-phase AC motor at 10/120 V rated value 5 hp 		
 at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value 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 at 600 V rated value at 600 V rated value for single-phase AC motor at 110/120 V rated value 5 hp 		
 at 125 V rated value at 220 V rated value at 600 V rated value 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 at 600 V rated value for single-phase AC motor at 110/120 V rated value 5 hp 		
 at 220 V rated value at 600 V rated value 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 at 600 V rated value for 3-phase AC motor at 600 V rated value for single-phase AC motor at 110/120 V rated value 5 hp 		
 at 600 V rated value 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 at 600 V rated value for single-phase AC motor at 110/120 V rated value 5 hp 		
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 • at 600 V rated value for single-phase AC motor — at 110/120 V rated value 5 hp		
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		
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value for single-phase AC motor — at 110/120 V rated value • 5 hp		- Taking Switching per 100 million (17 V, 1 miz)
 at 480 V rated value 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 600 V rated value yielded mechanical performance [hp] for single-phase AC motor — at 110/120 V rated value 5 hp		CF A
yielded mechanical performance [hp] ● for single-phase AC motor — at 110/120 V rated value 5 hp		
◆ for single-phase AC motor — at 110/120 V rated value 5 hp		02 A
— at 110/120 V rated value 5 hp		
·		
— at 230 V rated value 15 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 standard mounting rail according to DIN EN 60715
side-by-side mounting	Yes
height	114 mm
width	55 mm
depth	130 mm
required spacing	
 with side-by-side mounting 	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
 for grounded parts 	
— forwards	10 mm
— upwards	10 mm
— at the side	6 mm
— downwards	10 mm
for live parts	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	6 mm
Connections/ Terminals	
type of electrical connection	
• for main current circuit	screw-type terminals
for auxiliary and control circuit	spring-loaded terminals
at contactor for auxiliary contacts	Spring-type terminals
of magnet coil	Spring-type terminals Spring-type terminals
type of connectable conductor cross-sections	Opinig-type terminals
for main contacts	
	2v (1 25 mm²) 1v (1 50 mm²)
— solid or stranded	2x (1 35 mm²), 1x (1 50 mm²)
— finely stranded with core end processing	2x (1 25 mm²), 1x (1 35 mm²)
at AWG cables for main contacts	2x (18 2), 1x (18 1)
connectable conductor cross-section for main contacts	4 05
finely stranded with core end processing	1 35 mm²
connectable conductor cross-section for auxiliary	
contacts	0.5 0.5 mm²
solid or stranded	0.5 2.5 mm ²
finely stranded with core end processing	0.5 1.5 mm ²
finely stranded without core end processing	0.5 2.5 mm²
type of connectable conductor cross-sections	
 for auxiliary contacts 	

2x (0.5 ... 2.5 mm²) - solid or stranded - finely stranded with core end processing 2x (0.5 ... 1.5 mm²) - finely stranded without core end processing 2x (0.5 ... 2.5 mm²) • at AWG cables for auxiliary contacts 2x (20 ... 14) AWG number as coded connectable conductor cross section for main contacts 18 ... 1 20 ... 14 • for auxiliary contacts Safety related data product function • mirror contact according to IEC 60947-4-1 Yes • positively driven operation according to IEC 60947-No 5-1 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 low demand rate according to SN 100 FIT T1 value for proof test interval or service life according to 20 y IP20 protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529 finger-safe, for vertical contact from the front suitability for use

Certificates/ approvals

General Product Approval

· safety-related switching OFF





Confirmation



<u>KC</u>



Functional
Safety/Safety of Declaration of Conformity
Machinery

Test Certificates

Yes



Type Examination Certificate





Special Test Certificate

Type Test Certificates/Test Report

Marine / Shipping













Marine / Shipping other Railway Dangerous Good



Confirmation Conf

Confirmation

Vibration and Shock

<u>Transport Information</u>

Further information

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=3RT2038-3AP00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2038-3AP00

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2038-3AP00

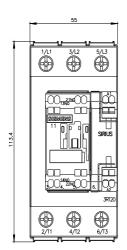
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax de.aspx?mlfb=3RT2038-3AP00&lang=en

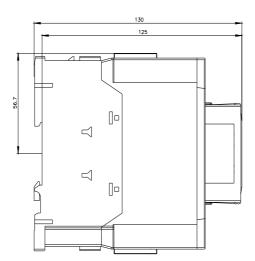
Characteristic: Tripping characteristics, I2t, Let-through current

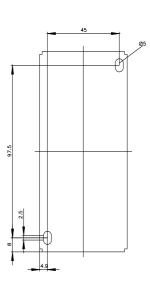
https://support.industry.siemens.com/cs/ww/en/ps/3RT2038-3AP00/char

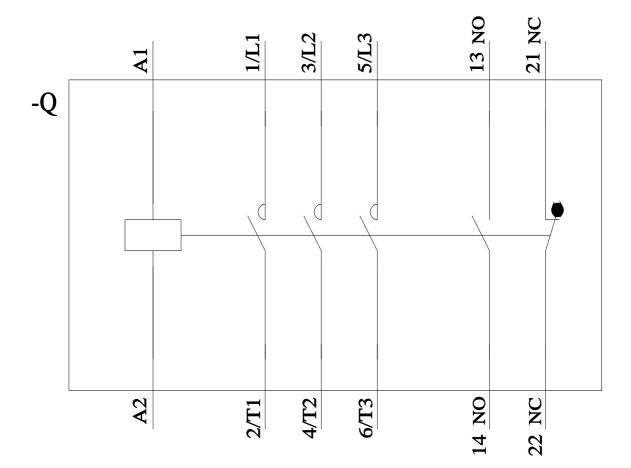
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2038-3AP00&objecttype=14&gridview=view1









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