SIEMENS

Data sheet

3RT2038-3NB30-0CC0



power contactor, AC-3e/AC-3, 80 A, 37 kW / 400 V, 3-pole, 20-33 V AC/DC, 50/60 Hz, with integrated varistor, auxiliary contacts: 1 NO + 1 NC, main circuit: screw terminal, control and auxiliary circuit: spring-loaded terminal, communication-capable

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 	Yes
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 	2 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	7.7g / 5 ms, 4.5g / 10 ms
• at DC	7.7g / 5 ms, 4.5g / 10 ms
shock resistance with sine pulse	
• at AC	12g / 5 ms, 7g / 10 ms
• at DC	12g / 5 ms, 7g / 10 ms
mechanical service life (operating 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	90 A
rated value	
 at AC-1 up to 690 V at ambient temperature 40 °C 	90 A
rated value	90 A
— up to 690 V at ambient temperature 60 °C	80 A
rated 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 AC-5b up to 400 V rated value	79.2 A
at AC-5b up to 400 V rated valueat AC-6a	66.4 A
	70 A
 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	70 A
value	
 up to 500 V for current peak value n=20 rated 	70 A
value	
— up to 690 V for current peak value n=20 rated	58 A
value ● at AC-6a	
— up to 230 V for current peak value n=30 rated	46.7 A
value	40.7 A
— up to 400 V for current peak value n=30 rated	46.7 A
value	
 up to 500 V for current peak value n=30 rated 	46.7 A
value	
 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	35 mm²
rated value	O mili
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	0.071
— at 24 V rated value	55 A

	— at 60 V rated value	55 A
** at 1 current path a DC-3 at DC-5 — at 260 V rated value — at 400 V rated value — at 600 V rated value — at 700 V rated value — at 700 V rated value — at 110 V rated value — at 600 V rated value — 55 A — at 24 V rated value — 55 A — at 20 V rated value — 55 A — at 10 V rated value — 55 A — at 10 V rated value — 50 A — at 100 V rated value — 55 A — at 20 V rated value — 55 A — at 20 V rated value — 57 KW — at 600 V rated value — 37 KW — at 200 V rated value — at 400 V rated value — at 200 V rated value — at 600 V rated va		
	•	35 A
at 600 Y rated value at 124 V rated value at 100 V rated value at 100 V rated value at 120 V rated value at 240 V rated value at 260 V rated value at 600 V rated value at 600 V rated value at 600 V rated value at 240 V rated value at 110 V rated value at 240 V rated value		
with 2 current paths in series at DC-3 at DC-5 = at 24 V rated value = at 100 V rated value = at 100 V rated value = at 100 V rated value = at 200 V rated value = at 440 V rated value = at 440 V rated value = at 600 V rated value = at 110 V rated value = at 220 V rated value = at 600 V rated val		
	 with 2 current paths in series at DC-3 at DC-5 	
		55 A
	— at 60 V rated value	45 A
	— at 110 V rated value	25 A
■ at 600 V rated value ■ with 3 current paths in series at DC-3 at DC-5 ■ at 24 V rated value □ at 100 V rated value □ at 110 V rated value □ at 220 V rated value □ at 220 V rated value □ at 400 V rated value □ at 400 V rated value □ at 400 V rated value □ at 230 V rated value □ at 400 V rated value □ at 600 V rated value □ pu to 200 V rated value □ pu to 200 V for current peak value n=20 rated value □ pu to 500 V for current peak value n=20 rated value □ pu to 500 V for current peak value n=30 rated value □ pu to 500 V for current peak value n=30 rated value □ pu to 500 V for current peak value n=30 rated value □ pu to 500 V for current peak value n=30 rated value □ pu to 500 V for current peak value n=30 rated value □ pu to 500 V for current peak value n=30 rated value □ pu to 500 V for current peak value n=30 rated value □ pu to 500 V for current peak value n=30 rated value □ pu to 500 V for current peak value n=30 rated value □ pu to 500 V for current peak value n=30 rated value □ pu to 500 V for current peak value n=30 rated value □ pu to 500 V for current peak value n=30 rated value □ pu to 500 V for current peak value n=40 rate value □ pu to 500 V for current peak value n=40 rate value □ pu t	— at 220 V rated value	5 A
- with 3 current paths in series at DC-3 at DC-5	— at 440 V rated value	0.27 A
at 24 V rated value	— at 600 V rated value	0.16 A
	 with 3 current paths in series at DC-3 at DC-5 	
at 110 V rated value at 220 V rated value at 440 V rated value at 600 V rated value at 400 V rated value at 600 V rated value at 500 V rated value at 500 V rated value at 600 V rated value at 500 V rated value at 600 V rated value 20 rated value at 600 V rated value 20 rated value at 600 V roc current peak value n-20 rated value at 600 V roc current peak value n-20 rated value at 600 V roc current peak value n-20 rated value at 600 V roc current peak value n-30 rated value at 600 V roc current peak value n-30 rated value at 600 V roc current peak value n-30 rated value at 600 V roc current peak value n-30 rated value at 600 V roc current peak value n-30 rated value at 600 V roc current peak value n-30 rated value at 600 V roc current peak value n-30 rated value at 600 V roc current peak value n-30 rated value at 600 V roc current peak value n-30 rated value at 600 V roc current peak value n-30 rated value at 600 V roc current peak value n-30 rated value at 600 V roc current peak value n-30 rated value at 600 V roc current peak value n-30 rated value at 600 V roc current peak value n-30 rated value at 600 V roc current peak value n-30 rated value at 600 V roc current peak value n-30 ra	— at 24 V rated value	55 A
- at 220 V rated value - at 460 V rated value 0.6 A 0.6 A 0.35 A operating power • at AC-2 at 400 V rated value • at AC-3 - at 230 V rated value - at 400 V rated value - at 400 V rated value - at 500 V rated value - at 600 V rated value - at 500 V rated value - at 600 V rated value - up to 500 V for current peak value n=20 rated value - up to 500 V for current peak value n=20 rated value - up to 500 V for current peak value n=30 rated value - up to 500 V for current peak value n=30 rated value - up to 500 V for current peak value n=30 rated value - up to 500 V for current peak value n=30 rated value - up to 500 V for current peak value n=30 rated value - up to 500 V for current peak value n=30 rated value - up to 500 V for current peak value n=30 rated value - up to 500 V for current peak value n=30 rated value - up to 500 V for current peak value n=30 rated value - up to 500 V for current peak value n=30 rated value - up to 500 V for current peak value n=30 rated value - up to 500 V for current peak value n=30 rated value - up to 500 V for current peak value n=30 rated value - up to 500 V for current peak value n=30 rated value - up to 500 V for current peak value n=30 rated value - up to 500 V for current peak value n=30 rated value - up to 500 V for current peak value n=30 rated valu	— at 60 V rated value	55 A
- at 440 V rated value	— at 110 V rated value	55 A
operating power at AC-2 at 400 V rated value at AC-3 — at 230 V rated value — at 400 V rated value — at 500 V rated value — at 500 V rated value — at 500 V rated value — at 600 V rated value — at 400 V rated value — at 500 V rated value — at 500 V rated value — at 500 V rated value — at 600 V rated value operating power for approx. 200000 operating cycles at AC-4 • at 400 V rated value operating apparent power at AC-6a • up to 230 V for current peak value n=20 rated value • up to 600 V for current peak value n=20 rated value • up to 600 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value	— at 220 V rated value	25 A
e at AC-2 at 400 V rated value e at AC-3 — at 230 V rated value — at 500 V rated value — at 690 V rated value operating power for approx. 200000 operating cycles at AC-4 at 400 V rated value operating apparent power at AC-6a • up to 230 V for current peak value n=20 rated value • up to 600 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 690 V for current peak value n=30 rated value • up to 400 V for current peak value n=30 rated value • up to 590 V for current peak value n=30 rated value • up to 590 V for current peak value n=30 rated value • up to 590 V for current peak value n=30 rated value • up to 590 V for current peak value n=30 rated value • up to 590 V for current peak value n=30 rated value • up to 590 V for current peak value n=30 rated value • up to 590 V for current peak value n=30 rated value • up to 590 V for current peak value n=30 rated value • up to 590 V for current peak value n=30 rated value • up to 590 V for current peak value n=30 rated value • up to 590 V for current peak value n=30 rated value • up to 590 V for current peak value n=30 rated value • up to 590 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value	— at 440 V rated value	0.6 A
at AC-2 at 400 V rated value at AC-3 — at 230 V rated value — at 400 V rated value — at 690 V rated value — at 690 V rated value — at 400 V rated value — at 500 V rated value — at 500 V rated value — at 690 V rated value operating power for approx. 200000 operating cycles at AC-4 at 400 V rated value operating power for approx. 200000 operating cycles at AC-4 at 400 V rated value operating power for approx. 200000 operating cycles at AC-4 at 400 V rated value operating power for approx. 200000 operating cycles at AC-4 at 400 V rated value operating power for approx. 200000 operating cycles at AC-4 at 400 V rated value operating power for approx. 200000 operating cycles at AC-4 at 400 V rated value operating power for approx. 200000 operating cycles at AC-4 at 400 V rated value 15.8 kW 21.8 kW 27.8 kVA 48.4 kVA 60.6 kVA 60.5 kVA 60.6 kVA 60.5 kVA 60.6 kVA 60.5 kVA 60.5 kVA 60.6 kVA 60.5 kVA 60.6 kVA 60.5 kVA 60.6 kVA	— at 600 V rated value	0.35 A
at AC-3 at 230 V rated value at AC 3e at AC-3e at 230 V rated value at AC-3e at 230 V rated value at AC 3e at 400 V rated value at 500 V rated value at 690 V rated value at 690 V rated value at 690 V rated value 57 kW 45 kW 22 kW 37 kW 45 kW 46 kW 47 kW 48 kW 48 kW 49 to 230 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value up to 500 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value sup to 500 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C ilimited to 10 s switching at zero current maximum ilimited to 50 s switching at zero current maximum ilimited to 30 s switching at zero current maximum ilimited to 60 s switching at zero current maximum ilimited to 60 s switching at zero current maximum ilimited to 60 s switching at zero current maximum ilimited to 60 s switching at zero current maximum ilimited to 60 s switching at zero current maximum ilimited to 60 switching at zero current maxi	operating power	
- at 230 V rated value - at 400 V rated value - at 690 V rated value - at 330 V rated value - at 400 V rated value - at 590 V rated value - at 590 V rated value - at 690 V rated value	 at AC-2 at 400 V rated value 	37 kW
- at 400 V rated value - at 590 V rated value 45 kW • at AC-3e - at 230 V rated value - at 400 V rated value - at 500 V rated value - at 690 V rated value • up to 230 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 690 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=3	• at AC-3	
- at 500 V rated value - at 690 V rated value - at 230 V rated value - at 400 V rated value - at 500 V rated value - at 690 V rated value - at 500 V rated value - at 690 V rated value	— at 230 V rated value	22 kW
- at 690 V rated value • at AC-3e - at 230 V rated value - at 400 V rated value - at 590 V rated value - at 690 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value • at 690 V rated value • up to 230 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 500 V for current peak value n=30 rated value • up to 400 °C • limited to 1 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 30 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current	— at 400 V rated value	37 kW
at AC-3e — at 230 V rated value — at 400 V rated value — at 590 V rated value — at 690 V rated value Operating power for approx. 200000 operating cycles at AC-4 at 400 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value operating apparent power at AC-6a up to 500 V for current peak value n=30 rated value operating apparent power at AC-6a up to 500 V for current peak value n=30 rated value operating apparent power at AC-6a up to 500 V for current peak value n=30 rated value oup to 690 V for current peak value n=30 rated value oup to 690 V for current peak value n=30 rated value oup to 500 V for current peak value n=30 rated value oup to 600 V for current peak value n=30 rated value oup to 500 V for current peak value n=30 rated value oup to 600 V for current peak value n=30 rated value oup to 600 V for current peak value n=30 rated value oup to 600 V for current peak value n=30 rated value oup to 600 V for current peak value n=30 rated value oup to 600 V for current peak value n=30 rated value oup to 600 V for current peak value n=30 rated value oup to 600 V for current peak value n=30 rated value oup to 600 V for current peak value n=30 rated value oup to 600 V for current peak value n=30 rated value oup to 600 V for current peak value n=30 rated value oup to 600 V for current peak value n=30 rated value oup to 600 V for current peak value n=30 rated value oup to 600 V for current peak value n=30 rated value oup to 600 V for current peak value n=30 rated value oup to 600 V for current peak value n=30 rated value oup to 600 V for current peak value n=30 rated value oup to 600 V for c	— at 500 V rated value	37 kW
- at 230 V rated value - at 400 V rated value - at 690 V rated value • at 400 V rated value • at 690 V rated value • up to 230 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 690 V for current peak value n=30 rated value • up to 400 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value sup to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C • limited to 1 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 30 s switching at zero current maximum • limited to 60 s switching at zero current ma	— at 690 V rated value	45 kW
- at 400 V rated value - at 500 V rated value - at 690 V rated value operating power for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value • 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 • up to 690 V for current peak value n=20 rated value • up to 690 V for current peak value n=30 rated value • up to 400 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value sup to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C • limited to 10 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 30 s switching at zero current maximum • limited to 30 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum •	• at AC-3e	
- at 500 V rated value - at 690 V rated value operating power for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operating apparent power at AC-6a • up to 230 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a • up to 500 V for current peak value n=20 rated value operating apparent power at AC-6a • up to 230 V for current peak value n=30 rated value operating apparent power at AC-6a • up to 500 V for current peak value n=30 rated value oup to 690 V for current peak value n=30 rated value oup to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C • limited to 10 s switching at zero current maximum olimited to 10 s switching at zero current maximum olimited to 10 s switching at zero current maximum olimited to 60 s switching at zero cu	— at 230 V rated value	22 kW
	— at 400 V rated value	37 kW
operating power for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value operating apparent power at AC-6a • up to 230 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 230 V for current peak value n=20 rated value • up to 230 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • limited to 1 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum no-load switching frequency • at AC • at DC operating frequency • at AC-1 maximum 15.8 kW 21.8 kW 27.8 kVA 48.4 kVA 60.6 kVA 69.3 kVA 18.6 kVA 32.3 kVA 40.4 kVA 55.8 kVA 18.6 kVA	— at 500 V rated value	37 kW
at AC-4 • at 400 V rated value • at 690 V rated value operating apparent power at AC-6a • 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 • up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a • up to 230 V for current peak value n=20 rated value operating apparent power at AC-6a • up to 230 V for current peak value n=30 rated value • up to 400 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C • limited to 1 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 60 s switching at zer		45 kW
 at 400 V rated value at 690 V rated value at 690 V rated value at 690 V rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 690 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching frequency at AC at DC operating frequency at AC-1 maximum 700 1/h 	operating power for approx. 200000 operating cycles	
• at 690 V rated value operating apparent power at AC-6a • up to 230 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 230 V for current peak value n=30 rated value • up to 400 V for current peak value n=30 rated value • up to 400 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • up to 600 V for current peak value n=30 rated value • limited to 1 s switching at zero current maximum • limited to 5 s switching at zero current max		45.0 kM
operating apparent power at AC-6a		
 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 up to 690 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum at AC at DC operating frequency at AC-1 maximum at AC-1 maximum 27.8 kVA 48.4 kVA 60.6 kVA 48.4 kVA 48.4 kVA 60.6 kVA 48.5 kVA 18.6 kVA 32.3 kVA 40.4 kVA 55.8 kVA 1 298 A; Use minimum cross-section acc. to AC-1 rated value 640 A; Use minimum cross-section acc. to AC-1 rated value 41 4 A; Use minimum cross-section acc. to AC-1 rated value 1 500 1/h 1 500		21.0 KVV
 up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum no-load switching frequency at AC at DC operating frequency at AC-1 maximum 		27.0 1/1/1
 up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum l		
• up to 690 V for current peak value n=20 rated value • up to 230 V for current peak value n=30 rated value • up to 400 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • limited to 1 s switching at zero current maximum • limited to 1 s switching at zero current maximum • limited to 1 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at	·	
 operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum limited to 5 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching	·	
 up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum limited to 5 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to		00.0 KV/I
 up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum limited to 5 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 10 s switching at zero current maximum lim		18 6 kVA
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short-time withstand current in cold operating state up to 40 °C • limited to 1 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 30 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum olimited to 60 s switching at zero current maximum alimited to 60 s switching at zero current maximum fooload switching frequency • at AC at DC operating frequency • at AC-1 maximum 1 298 A; Use minimum cross-section acc. to AC-1 rated value 444 A; Use minimum cross-section acc. to AC-1 rated value 415 ON 1/h 1 500 1/h 700 1/h		
 up to 40 °C limited to 1 s switching at zero current maximum limited to 5 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum at AC at DC at DC at AC-1 maximum 1 298 A; Use minimum cross-section acc. to AC-1 rated value 414 A; Use minimum cross-section acc. to AC-1 rated value 333 A; Use minimum cross-section acc. to AC-1 rated value 333 A; Use minimum cross-section acc. to AC-1 rated value 350 1/h 1 500 1/h 700 1/h 	·	
 limited to 5 s switching at zero current maximum limited to 10 s switching at zero current maximum limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum limited to 60 s switching at zero current maximum no-load switching frequency at AC at DC operating frequency at AC-1 maximum at AC-1 maximum 898 A; Use minimum cross-section acc. to AC-1 rated value 333 A; Use minimum cross-section acc. to AC-1 rated value 1 500 1/h 1 500 1/h 700 1/h 		
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 limited to 30 s switching at zero current maximum limited to 60 s switching at zero current maximum no-load switching frequency at AC at DC operating frequency at AC-1 maximum 414 A; Use minimum cross-section acc. to AC-1 rated value 333 A; Use minimum cross-section acc. to AC-1 rated value 1 500 1/h 1 500 1/h 700 1/h 	 limited to 5 s switching at zero current maximum 	898 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 60 s switching at zero current maximum no-load switching frequency at AC at DC 1 500 1/h operating frequency at AC-1 maximum 700 1/h 	 limited to 10 s switching at zero current maximum 	640 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency		
 at AC at DC 1 500 1/h 1 500 1/h operating frequency at AC-1 maximum 700 1/h 		333 A; Use minimum cross-section acc. to AC-1 rated value
 at DC operating frequency at AC-1 maximum 700 1/h 	no-load switching frequency	
operating frequency ◆ at AC-1 maximum 700 1/h		
• at AC-1 maximum 700 1/h		1 500 1/h
• at AC-2 maximum 350 1/h		
	• at AC-2 maximum	350 1/h

	T00 4#
• 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/DC
control supply voltage at AC	
 at 50 Hz rated value 	20 33 V
 at 60 Hz rated value 	20 33 V
control supply voltage at DC	
rated value	20 33 V
operating range factor control supply voltage rated	
value of magnet coil at DC	
• initial value	0.8
• full-scale value	1.1
operating range factor control supply voltage rated value of magnet coil at AC	
● at 50 Hz	0.8 1.1
● at 60 Hz	0.8 1.1
design of the surge suppressor	with varistor
inrush current peak	3 A
duration of inrush current peak	50 μs
locked-rotor current mean value	1 A
locked-rotor current peak	2.6 A
duration of locked-rotor current	230 ms
holding current mean value	40 mA
apparent pick-up power of magnet coil at AC	40.14
• at 50 Hz	40 VA
• at 60 Hz	40 VA
apparent holding power of magnet coil at AC	0.1/4
• at 50 Hz	2 VA
• at 60 Hz	2 VA
closing power of magnet coil at DC	23 W 1 W
holding power of magnet coil at DC	I VV
closing delay • at AC	35 110 ms
• at DC	35 110 ms
opening delay	33 110 ms
• at AC	30 55 ms
• at DC	30 55 ms
arcing time	10 20 ms
control version of the switch operating mechanism	Standard A1 - A2, optionally via function module
Auxiliary circuit	otaliaala iii ii a ja j
number of NC contacts for auxiliary contacts	1
instantaneous contact number of NO contacts for auxiliary contacts	1
instantaneous contact operational current at AC-12 maximum	10 A
operational current at AC-12 maximum	1071
• at 230 V rated value	10 A
at 400 V rated value	3 A
at 500 V rated value 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 48 V rated valueat 60 V rated value	2 A

* at 110 V rated value * at 1220 V rated value * at 220 V rated value * at 250 V rated value * at 360 V rated value * at 1012 V rated value * at 200 V rated value * with type of assignment 2 required * (at 50 V 80 V A) * (at 50 V 80 V		
• at 220 V rated value	 at 110 V rated value 	1 A
• at 800 V rated value		
1 faulty switching per 100 million (17 V, 1 mA)		
### full-load current (FLA) for 3-phase AC motor * all 480 V rated value * at 600 V rated value * at 600 V rated value * at 600 V rated value * at 101/20 V rated value - at 230 V rated value - at 230 V rated value - at 200/208 V rated value - at 480/480 V rated value - at 575000 V rated value - with type of coordination of the main circuit - with type of coordination of the main circuit - with type of coordination of the main circuit - with type of coordination of the auxiliary switch - with type of coordination of the auxiliary switch - for short-circuit protection of the auxiliary switch - side-by-side mounting of the standard short of short switch - side-by-side mounting - with side-by-side mounting - with side-by-side mounting - for wards - upwards - upwards - for wards - for		
tull-oad current (FLA) for 3-phase AC motor • at 80 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • of single-phase AC motor • at 110 Y20 V rated value • of c-phase AC motor • at 200200 V rated value • of c-phase AC motor • at 200200 V rated value • of c-phase AC motor • at 200200 V rated value • at 200200 V rated value • at 404080 V rated value • at 404080 V rated value • of short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of assignment 2 required • of short-circuit protection of the main circuit — with type of assignment 2 required • for short-circuit protection of the auxiliary switch • safet-by-side mounting • with side by-side mounting • with side by-side mounting • for short-circuit sylvane • for movards • for		1 faulty switching per 100 million (17 V, 1 mA)
• at 88 V rated value	UL/CSA ratings	
• al 800 V rated value yielded mechanical performance (hp) • for single-phase AC motor — al 101/120 V rated value • for 3-phase AC motor — al 220/230 V rated value • al 220/230 V rated value — al 220/230 V rated value — at 276/800 V rated value — at 260/800 V rated value — at 276/800 V rated value — at 276/800 V rated value — at 576/800 V rated value — at 576/800 V rated value Osh p Osh	full-load current (FLA) for 3-phase AC motor	
yielded mechanical performance [tp] • for single-phase AC motor — at 250 V rated value • or short-circuit protection of the main circuit — with type of coordination 1 required — with type of coordination 1 required — with type of assignment 2 required — vith type of assignment 2 required — vith type of assignment 2 required — vith side value — of short-circuit protection of the auxiliary switch required — of short-circuit protection of the auxiliary switch required — of short-circuit protection of the auxiliary switch required — of short-circuit protection of the auxiliary switch required — of short-circuit protection of the auxiliary switch required — of short-circuit protection of the auxiliary switch required — of short-circuit protection of the auxiliary switch required — of short-circuit protection of the auxiliary switch required — of short-circuit protection of the auxiliary switch required — of short-circuit protection of the auxiliary switch required — of short-circuit protection — of main current of the switch — of main current circuit — of main current circu	 at 480 V rated value 	65 A
of or single-phase AC motor	 at 600 V rated value 	62 A
	yielded mechanical performance [hp]	
at 230 V rated value • for 3-phase AC motor at 220/230 V rated value at 575/600 V rated value	 for single-phase AC motor 	
• for 3-phase AC motor — at 200/203 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 75/600 V rated value — both protection Short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required — of short-circuit protection of the auxiliary switch required Fish of short-circuit protection of the auxiliary switch Fish of short-circuit of the auxiliary switch Fish of short-circuit of the auxiliary and control circuit of main protection of the auxiliary and control circuit of main protection of the auxiliary and control circuit of main protection of the auxiliary and control circuit of main protection of the auxiliary and control circuit of main protection of the auxiliary and control circuit of main protection of the auxiliary and control circuit of main protection of the auxiliary and control circuit of main protection of the auxiliary contacts of main protection of the auxiliary contacts of main protection of the auxiliary contacts of main protection of the au	 — at 110/120 V rated value 	5 hp
	— at 230 V rated value	15 hp
- at 220/230 V rated value - at 460/480 V rated value - at 676/600 V rated value - with type of coordination 1 required - with type of coordination 1 required - with type of coordination 1 required - with type of assignment 2 required - with type of assignment 2 required - with type of assignment 2 required - for short-circuit protection of the auxiliary switch - for for auxiliary contacts - for for auxiliary and cortrol circuit - for for auxiliary and control circuit - for for auxiliary contacts - for for appret coil - for for for auxiliary contacts - for for grounded with core end processing - at the side - for for short-circuit spring-type terminals - for for auxiliary contacts - for for auxiliary contacts - for for auxiliary contacts - for for grounded with core end processing - for for for auxiliary contacts - for	 for 3-phase AC motor 	
at 480/480 V rated value at 575/690 V rated value contact rating of auxillary contacts according to UL Short-circuit protection design of the fuse link with type of coordination 1 required with type of coordination 1 required with type of assignment 2 required with side of a signment 2 required side by-side mounting without a steen and backward by ++ 22.5° on vertical mounting surface; can be tilled forward and backward by ++ 22.5° on vertical mounting surface and bac		20 hp
contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch • side-by-side mounting of the auxiliary switch • side-by-side mounting • with side-by-side mounting • of mam • downwards • for grounded parts • for grounded parts • for wards • for live parts • for live parts • for wards • upwards • for live parts • for wards • for live parts • for main current circuit • for auxiliary and control circuit • for for	 at 220/230 V rated value 	25 hp
contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position * #/180" rotation possible on vertical mounting surface; can be tilted forward and backward by 4-/ 22.5" on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 • side-by-side mounting • with side-by-side mounting • with side-by-side mounting — forwards — upwards — upwards — of ownwards — of orgrounded parts — forgrounded parts — of ownwards — at the side — downwards — 10 mm — of ownwards — 10 mm • for live parts — forwards — upwards — at the side — downwards — 10 mm • for live parts — forwards — upwards — at the side — downwards — 10 mm • for live parts — for main current circuit • for auxiliary and control circuit • for auxiliary and control circuit • of or main current circuit • of or main current circuit • of magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded • finely stranded with core end processing • x(1 35 mm²), 1x (1 35 mm²)	 — at 460/480 V rated value 	50 hp
Short-circuit protection design of the fuse link of or short-circuit protection of the main circuit - with type of coordination 1 required - with type of assignment 2 required (415 V, 80 kA) (415	 at 575/600 V rated value 	60 hp
design of the fuse link	contact rating of auxiliary contacts according to UL	A600 / P600
• for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method • side-by-side mounting • side-by-side mounting • with side-by-side mounting wirface; can be titled forward and backward by #- 22.5° on vertical mounting surface; can be titled forward and backward by #- 22.5° on vertical mounting surface; can be titled forward and backward by #- 22.5° on vertical mounting surface; can be titled forward and backward by #- 22.5° on vertical mounting surface; can be titled forward and backward by #- 22.5° on vertical mounting surface; can be titled forward and backward by #- 22.5° on vertical mounting surface; can be titled forward and backward by #- 22.5° on vertical mounting surface; can be titled forward and backward b	Short-circuit protection	
- with type of coordination 1 required - with type of assignment 2 required - with type of assignment 2 required - for short-circuit protection of the auxiliary switch required - for short-circuit protection of the auxiliary switch required - for short-circuit protection of the auxiliary switch required - for short-circuit protection of the auxiliary switch required - forward and backward by +/- 22.5" on vertical mounting surface; can be tilted forward and backward by +/- 22.5" on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 - side-by-side mounting - side-by-side mounting - with side-by-side mounting - orwards - downwards - at the side - of orgrounded parts - forwards - at the side - downwards - of live parts - forwards - ownwards - for live parts - forwards - for live parts - forwards - the side - downwards - to mm - the side - downwards - to mm - the side - downwards - forwards - to mm - the side - for grounded parts - forwards - for live parts - forwards - to mm - the side - downwards - to mm - the side - for auxiliary and control circuit - for auxiliary and control circuit - for for auxiliary and control circuit - for for auxiliary and control circuit - of magnet coil - specific perminals - spring-loaded terminals - spring-lyee terminals -	design of the fuse link	
- with type of assignment 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method • side-by-side mounting • side-by-side mounting • side-by-side mounting • with side-by-side mounting • forwards - upwards - at the side • for grounded parts - forwards - at the side - downwards - to live parts - forwards - to live parts - forwards - to many and a control or or or or own and a control own and a	 for short-circuit protection of the main circuit 	
- with type of assignment 2 required • for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch respectively. for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch respectively. for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch respectively. for short-circuit spring. for short-circuit spring-based terminals for short-circuit protection of the auxiliary switch for main current circuit for auxiliary contacts for main current circuit for auxiliary and control circuit fo	 — with type of coordination 1 required 	
• for short-circuit protection of the auxiliary switch required	— with type of assignment 2 required	gG: 160A (690V,100kA), aM: 80A (690V,100kA), BS88: 125A
Installation/ mounting/ dimensions mounting position		
mounting position mounting position fastening method side-by-side mounting • with side-by-side mounting • with side-by-side mounting • with side-by-side mounting • with side-by-side mounting • forwards — upwards — upwards — at the side • for grounded parts — forwards — upwards — at the side • for grounded parts — forwards — at the side — downwards — at the side — downwards — 10 mm • of r live parts — forwards — upwards — to mm • for live parts — forwards — upwards — upwards — upwards — 10 mm • for live parts — forwards — upwards — at the side — downwards — at the side — for main current circuit • for auxiliary and control circuit • for auxiliary and control circuit • of main current circuit • for auxiliary and control circuit • of main current circuit • of main current circuit • of maxiliary and control circuit • of maxiliary contacts • of magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing • x(1 25 mm²), 1x (1 50 mm²) • x(1 25 mm²), 1x (1 50 mm²)	· · · · · · · · · · · · · · · · · · ·	gG: 10 A (500 V, 1 kA)
mounting position fastening method e side-by-side mounting height width depth required spacing • with side-by-side mounting — forwards — upwards — downwards — the side — downwards — the side — downwards — the side — downwards — upwards — the side — downwards — the side — downwards — upwards — the side — downwards — to for live parts — forwards — upwards — the side — downwards — the side — forwards — the side — downwards — the side — forwards — forwards — the side — forwards — f		
fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 • side-by-side mounting height width formulated spacing • with side-by-side mounting • owners and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 * side-by-side mounting • with side-by-side mounting • forwards — upwards — upwards — downwards — of org grounded parts — for grounded parts — of rowards — upwards — at the side — downwards — 10 mm — at the side — downwards — 10 mm • for live parts — forwards — upwards — upwards — upwards — of more side — downwards — 10 mm • for mive parts — forwards — upwards — upwards — upwards — ownwards — 10 mm • for mive parts — forwards — ownwards — 10 mm • for mive parts — formards — of more side — forwards — of man current circuit • for auxiliary and control circuit • for auxiliary contacts • of magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing for man current circuit sories - 2x(1 35 mm²), 1x (1 50 mm²) • finely stranded with core end processing		+/-180° rotation possible on vertical mounting surface; can be tilted
screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 • side-by-side mounting	mounting position	
height width	fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN
width depth 130 mm required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — of ownwards — upwards — at the side • for grounded parts — forwards — upwards — at the side — downwards — of mm — the side — downwards — to mm • for live parts — forwards — upwards — upwards — to mm • for live parts — forwards — upwards — at the side — downwards — to mm • for at the side — forwards — upwards — to mm — upwards — to mm — downwards — to mm • for auther side — for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing 2x (1 25 mm²), 1x (1 50 mm²) • finely stranded with core end processing	 side-by-side mounting 	Yes
depth required spacing	height	114 mm
required spacing with side-by-side mounting forwards upwards upwards of or grounded parts forwards upwards 10 mm of or grounded parts forwards upwards 10 mm of or live parts forwards upwards of or live parts of ownwards of or mm odownwards of mm odownwards of mm contactor for auxiliary and control circuit of magnet coil type of connectable conductor cross-sections for main contacts of finely stranded with core end processing 10 mm of mm of mm core main current circuit of auxiliary and control circuit of magnet coil for auxiliary and control circuit of magnet coil for eight at mm of mm of mm contacts of magnet coil for eight at mm of mm contacts of magnet coil for eight at mm of mm contacts of magnet coil for eight at mm of mm	width	55 mm
 with side-by-side mounting — forwards — upwards — downwards — at the side 0 mm	•	130 mm
forwards	required spacing	
- upwards	with side-by-side mounting	
- downwards	— forwards	10 mm
- at the side • for grounded parts - forwards - upwards - at the side - downwards • for live parts - forwards - upwards • for live parts - forwards - upwards - upwards - upwards - to mm - upwards - upwards - downwards - at the side - downwards - at the side - at the side Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing 0 mm 10 m	— upwards	10 mm
for grounded parts — forwards — upwards — at the side — downwards — for live parts — forwards — orwards — orwards — upwards — ownwards — upwards — upwards — downwards — at the side — at the side — ormands — at the side — ownwards — at the side — own — at the side Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • solid or stranded • finely stranded with core end processing	— downwards	10 mm
- forwards 10 mm - upwards 6 mm - at the side 6 mm - downwards 10 mm • for live parts - forwards 10 mm • for wards 10 mm - upwards 10 mm - upwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 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 • of magnet coil Spring-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 mm²), 1x (1 35 mm²)	— at the side	0 mm
- upwards - at the side - downwards 10 mm • for live parts - forwards 10 mm • for wards 10 mm - upwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 10 mm - at the side 6 mm Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing 10 mm 5 mm 6 mm 7 mm 8 screw-type terminals 9 spring-loaded terminals 9 Spring-type terminals 9 Spring-type terminals 10 mm 9 Spring-type terminals 10 mm 20 mm 10 mm 20 mm 20 at using a screw-type terminals 20 at using a screw-type	 for grounded parts 	
- at the side - downwards 10 mm • for live parts - forwards - upwards 10 mm - downwards 10 mm - downwards - at the side 6 mm Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing 6 mm 10 mm 10 mm 6 mm Connections/ Terminals 10 mm 5 crew-type terminals 5 screw-type terminals 5 spring-loaded terminals 5 spring-type terminals 2x (1 35 mm²), 1x (1 50 mm²) 6 finely stranded with core end processing		
- downwards • for live parts - forwards - upwards - downwards - at the side Connections/ Terminals type of electrical connection • for main current circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing 10 mm 2 srew-type terminals Spring-loaded terminals Spring-loaded terminals Spring-type terminals 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 35 mm²)	•	
 for live parts forwards upwards downwards at the side Connections/ Terminals type of electrical connection for main current circuit for auxiliary and control circuit at contactor for auxiliary contacts of magnet coil type of connectable conductor cross-sections for main contacts solid or stranded finely stranded with core end processing 10 mm of mm Screw-type terminals Spring-type terminals 2x (1 35 mm²), 1x (1 50 mm²) finely stranded with core end processing 2x (1 25 mm²), 1x (1 35 mm²)		
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 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 mm²), 1x (1 35 mm²)		10 mm
- upwards - downwards - at the side Connections/ Terminals type of electrical connection for main current circuit screw-type terminals for auxiliary and control circuit at contactor for auxiliary contacts of magnet coil type of connectable conductor cross-sections for main contacts solid or stranded finely stranded with core end processing 10 mm 10 mm	•	
- downwards - at the side Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing 10 mm 6 mm 6 mm Screw-type terminals screw-type terminals spring-loaded terminals Spring-type terminals 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 35 mm²)		
- at the side Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing 6 mm 6 minely terminals 6 pring-type terminals 7 pring-type terminals 8 pring-type terminals 9 pring-type terminals 1 pring-type terminals 2 pring-type terminals 1 pring-type terminals 2 pring-type terminals 3 pring-type terminals 4 pring-type terminals 4 pring-type terminals 5 pring-type terminals 5 pring-type terminals 5 pring-type terminals 2 pring-type terminals	•	
type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing screw-type terminals screw-type terminals spring-loaded terminals Spring-type terminals Spring-type terminals 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²)		
type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing screw-type terminals spring-loaded terminals Spring-type terminals Spring-type terminals 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²)		o mm
 for main current circuit for auxiliary and control circuit at contactor for auxiliary contacts of magnet coil type of connectable conductor cross-sections for main contacts solid or stranded finely stranded with core end processing screw-type terminals Spring-type terminals Spring-type terminals 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 		
 for auxiliary and control circuit at contactor for auxiliary contacts of magnet coil type of connectable conductor cross-sections for main contacts solid or stranded finely stranded with core end processing spring-loaded terminals Spring-type terminals 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 		
 at contactor for auxiliary contacts of magnet coil type of connectable conductor cross-sections for main contacts solid or stranded finely stranded with core end processing Spring-type terminals Spring-type terminals 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 		
 of magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing Spring-type terminals 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 		
type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 35 mm²)		
ontacts		Spring-type terminals
 solid or stranded finely stranded with core end processing 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 	· · · · · · · · · · · · · · · · · · ·	
• finely stranded with core end processing 2x (1 25 mm²), 1x (1 35 mm²)		2x (1 35 mm²), 1x (1 50 mm²)

contacts

 finely stranded with core end processing connectable conductor cross-section for auxiliary contacts

solid or stranded

• finely stranded with core end processing

• finely stranded without core end processing

type of connectable conductor cross-sections

for auxiliary contacts

- solid or stranded

- finely stranded with core end processing

- finely stranded without core end processing

· at AWG cables for auxiliary contacts

AWG number as coded connectable conductor cross section

for main contacts

· for auxiliary contacts

1 ... 35 mm²

0.5 ... 2.5 mm²

0.5 ... 1.5 mm²

0.5 ... 2.5 mm²

2x (0.5 ... 2.5 mm²)

2x (0.5 ... 1.5 mm²)

2x (0.5 ... 2.5 mm²)

2x (20 ... 14)

18 ... 1

20 ... 14

Safety related data

product function

• mirror contact according to IEC 60947-4-1

 positively driven operation according to IEC 60947-5-1

B10 value with high demand rate according to SN 31920 proportion of dangerous failures

• with low demand rate according to SN 31920

• with high demand rate according to SN 31920

failure rate [FIT] with low demand rate according to SN 31920

T1 value for proof test interval or service life according to IEC 61508

protection class IP on the front according to IEC 60529

touch protection on the front according to IEC 60529 suitability for use

· safety-related switching OFF

Yes

No

1 000 000

40 %

73 %

100 FIT

20 a

IP20

finger-safe, for vertical contact from the front

Yes

Certificates/ approvals

General Product Approval





Confirmation



<u>KC</u>



EMC

Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates



Type Examination Certificate





Type Test Certificates/Test Report

Special Test Certificate

Marine / Shipping













Marine / Shipping

other

Railway

Dangerous Good



Further information

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=3RT2038-3NB30-0CC0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2038-3NB30-0CC0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2038-3NB30-0CC0

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

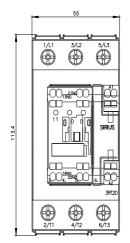
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2038-3NB30-0CC0&lang=en

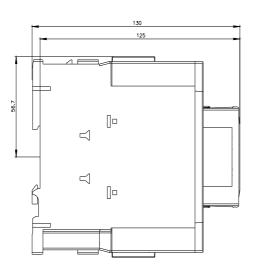
Characteristic: Tripping characteristics, I2t, Let-through current

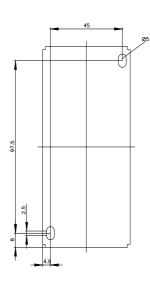
https://support.industry.siemens.com/cs/ww/en/ps/3RT2038-3NB30-0CC0/char

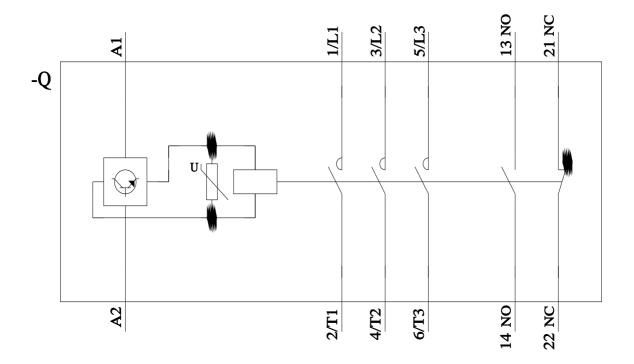
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2038-3NB30-0CC0&objecttype=14&gridview=view1









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