SIEMENS

Data sheet 3RT2045-1AG20



power contactor, AC-3e/AC-3, 80 A, 37 kW / 400 V, 3-pole, 110 V AC, 50/60 Hz, auxiliary contacts: 1 NO + 1 NC, screw terminal, size: S3 $\,$

product designation Power contactor product type designation 3RT2 General technical data size of contactor S3 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 15.9 W • at AC in hot operating state per pole 5.3 W • without load current share typical 25 W insulation voltage • of main circuit with degree of pollution 3 rated value 690 V surge voltage resistance • of main circuit rated value • of auxiliary circuit rated value maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	
product type designation General technical data size of contactor product extension • function module for communication • auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state • at AC in hot operating state per pole • at AC in hot operating state per pole • without load current share typical 25 W insulation voltage • of main circuit with degree of pollution 3 rated value for auxiliary circuit with degree of pollution 3 rated value for main circuit with degree of pollution 3 rated value for main circuit rated value for protective separation between for main circuit rated value for protective separation between for main circuit rated value for protective separation between for main circuit rated value for protective separation between for main circuit rated value for protective separation between for main circuit rated value for protective separation between for main circuit rated value for protective separation between for main circuit rated value for protective separation between for main circuit rated value for protective separation between for main circuit rated value for protective separation between for main circuit rated value for protective separation between for main circuit rated value for protective separation between for main circuit rated value for protective separation between for main circuit rated value for protective separation between for main circuit rated value for protective separation between for main circuit rated value for protective separation between for main circuit rated value for protective separation for main circuit rated value for protective for protective for main circuit rated value for protectiv	
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power loss [W] for rated value of the current • at AC in hot operating state 15.9 W • at AC in hot operating state per pole 5.3 W • without load current share typical 25 W insulation voltage • of main circuit with degree of pollution 3 rated value 1 000 V • of auxiliary circuit with degree of pollution 3 rated value 690 V surge voltage resistance • of main circuit rated value 8 kV • of auxiliary circuit rated value 6 kV maximum permissible voltage for protective separation between 690 V	
power loss [W] for rated value of the current • at AC in hot operating state 15.9 W • at AC in hot operating state per pole 5.3 W • without load current share typical 25 W insulation voltage • of main circuit with degree of pollution 3 rated value 1 000 V • of auxiliary circuit with degree of pollution 3 rated value 690 V surge voltage resistance • of main circuit rated value 8 kV • of auxiliary circuit rated value 66 kV maximum permissible voltage for protective separation between 690 V	
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insulation voltage • of main circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit rated value • of main circuit rated value • of auxiliary circuit rated value maximum permissible voltage for protective separation between • of with the service of pollution 3 rated value • of with the service of pollution 3 ra	
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surge voltage resistance	
 of main circuit rated value of auxiliary circuit rated value 6 kV maximum permissible voltage for protective separation between 690 V 	
• of auxiliary circuit rated value 6 kV maximum permissible voltage for protective separation between 690 V	
maximum permissible voltage for protective separation between 690 V	
the state of the s	
shock resistance at rectangular impulse	
• at AC 10.3g / 5 ms, 6,.g / 10 ms	
shock resistance with sine pulse	
• at AC 16.3g / 5 ms, 10.g / 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) 03/01/2017	
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 95 % maximum	
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 	1 000 V
• at AC-3e rated value maximum	1 000 V
operational current	
• at AC-1 at 400 V at ambient temperature 40 °C rated	125 A
value	
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated	125 A
value	
 up to 690 V at ambient temperature 60 °C rated value 	105 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 1000 V rated value	30 A
• at AC-3e	30 A
	90 A
— at 400 V rated value	80 A 80 A
— at 500 V rated value	
— at 690 V rated value	58 A
— at 1000 V rated value	30 A
• at AC-4 at 400 V rated value	66 A
• at AC-5a up to 690 V rated value	110 A
at AC-5b up to 400 V rated value	80 A
• at AC-6a	
 up to 230 V for current peak value n=20 rated value 	80 A
 up to 400 V for current peak value n=20 rated value 	80 A
 up to 500 V for current peak value n=20 rated value 	80 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 	54 A
 up to 400 V for current peak value n=30 rated value 	54 A
 up to 500 V for current peak value n=30 rated value 	54 A
 up to 690 V for current peak value n=30 rated value 	54 A
minimum cross-section in main circuit at maximum AC-1 rated	50 mm ²
value operational current for approx. 200000 operating cycles at	
AC-4	
• at 400 V rated value	34 A
• at 690 V rated value	24 A
operational current	
at 1 current path at DC-1	
— at 24 V rated value	100 A
— at 60 V rated value	60 A
— at 110 V rated value	9 A
— at 220 V rated value	2 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.4 A
with 2 current paths in series at DC-1	
— at 24 V rated value	100 A
— at 60 V rated value	100 A
— at 110 V rated value	100 A
	10 A
— at 220 V rated value	
— at 440 V rated value	1.8 A
— at 600 V rated value	1 A
with 3 current paths in series at DC-1	400 A
— at 24 V rated value	100 A
— at 60 V rated value	100 A
— at 110 V rated value	100 A
— at 220 V rated value	80 A
— at 440 V rated value	4.5 A

	— at 600 V rated value	2.6 A
= 8.6 V rated value	• at 1 current path at DC-3 at DC-5	
= 11 10 V Intels value	— at 24 V rated value	40 A
	— at 60 V rated value	6 A
### ### ### ### ### ### ### ### ### ##	— at 110 V rated value	2.5 A
With 2 current paths in series at DC-3 at DC-5	— at 220 V rated value	1 A
### with 2 current paths in series at DC-3 at DC-5 — at 24 V rated value — at 10 V rated value — at 20 V rated value — at 20 V rated value — at 40 V rated value — at 40 V rated value — at 40 V rated value — at 60 V rated value — at 70 V rated value — at 10 V rated value — at 10 V rated value — at 10 V rated value — at 20 V rated value — 37 kW operating power • at AC-2 at 400 V rated value — at 200 V rated value — at 800 V rated value — at 400 V rated value — at 600 V rated value — at 100 V rated value — at 100 V rated value — at 800 V rated value — at 100 V rated value — a	— at 440 V rated value	0.15 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	100 A
- at 220 V rated value - at 600 V rated value 0.42 A 0.16 A **with 3 current paths in series at DC-3 at DC-5 - at 24 V rated value 100 A - at 110 V rated value 100 A - at 110 V rated value 100 A - at 110 V rated value 100 A - at 120 V rated value 20 V rated value 35 A - at 440 V rated value 35 A - at 440 V rated value 37 kW **at AC-3 - at 230 V rated value 22 kW - at 230 V rated value 37 kW - at 560 V rated value 37 kW - at 660 V rated value 37 kW - at 660 V rated value 37 kW - at 660 V rated value 37 kW - at 400 V rated value 37 kW - at 560 V rated value 37 kW - at 690 V rated value 38 kW - at 1000 V rated value 38 kW - at 900 V rated value 39 kW - at 900 V rated value 30 V rated value 40 V rocurrent peak value n=20 rated value 40 V rocurrent peak value n=30 rated value 40 V rocur	— at 60 V rated value	100 A
	— at 110 V rated value	100 A
and the second section of the secti	— at 220 V rated value	7 A
with 3 current paths in series at DC-3 at DC-5	— at 440 V rated value	0.42 A
		0.16 A
	 with 3 current paths in series at DC-3 at DC-5 	
- at 110 V rated value	— at 24 V rated value	100 A
at 220 V rated value	— at 60 V rated value	100 A
	— at 110 V rated value	
operating power at AC-3 — 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 690 V rated value — at 690 V rated value — at 230 V rated value — at 300 V rated value — at 400 V rated value — at 500 V rated value — at 690 V for current peak value n=20 rated value — at 690 V for current peak value n=20 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 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	— at 220 V rated value	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 690 V rated value — at 690 V rated value — at 1000 V rated value — at 1000 V rated value — at 230 V rated value — at 230 V rated value — at 1000 V rated value — at 400 V rated value — at 690 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 — at 1000 V rated value — at 690 V rated value 9 to 200 V for current peak value n=20 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=30 rated value • up to 500 V f	— at 440 V rated value	0.8 A
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 1000 V rated value — at 1000 V rated value — at 1000 V rated value — at 230 V rated value — at 400 V rated value — at 400 V rated value — 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 — at 1000 V rated value — 25 kW operating power for approx. 200000 operating cycles at AC-4 4 at 400 V rated value operating apparent power at AC-8a 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 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 up to 500 V for current peak value n=30 rated value 40 F kVA 51 kVA 52 kW 53 kVA 54 kW 55 kVA 56 kVA 57 kVA 58 kVA 58 kVA 59 kVA 69 kVA 69 kVA 69 kVA 69 kVA 60 kVA 60 kVA 61 kVA 63 kVA 64 f kVA 65 kVA 66 f kVA 67 kVA 68 kVA 68 kVA 69 kVA 6	— at 600 V rated value	0.35 A
at AC-3 at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value at 1000 V rated value at 1000 V rated value at AC-3e at 230 V rated value at AC-3e at 230 V rated value at 400 V rated value at 500 V rated value 55 kW at 1000 V rated value 21.8 kW operating apparent power at AC-6a up to 230 V for current peak value n=20 rated value up to 800 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 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 46.5 kVA short-time withstand current in cold operating state up to 40 °C ilimited to 1 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 S switching at zero current maximum ilimited to 60 S switching at zero current maximum	operating power	
- at 230 V rated value - at 400 V rated value - at 590 V rated value - at 590 V rated value - at 590 V rated value - at 1000 V rated value - at 230 V rated value - at 1000 V rated value - at 230 V rated value - at 230 V rated value - at 230 V rated value - at 400 V rated value - at 400 V rated value - at 590 V rated value - at 590 V rated value - at 590 V rated value - at 1000 V rated value - at 400 V rated value - at 400 V rated value - at 400 V rated value - at 690 V rated value - at 500 V rated value - at 690 V rated value - at 500 V rated value - at 690 V rated	 at AC-2 at 400 V rated value 	37 kW
- at 400 V rated value - at 690 V rated value - at 1000 V rated value - at 230 V rated value - at 400 V rated value - at 400 V rated value - at 500 V rated value - at 690 V rated value - at 1000 V rated value - at 690 V ra	• at AC-3	
- at 500 V rated value	— at 230 V rated value	22 kW
- at 690 V rated value - at 1000 V rated value at AC-3e - at 230 V rated value - at 400 V rated value - at 400 V rated value - at 690 V rated value - at 400 V rated value - at 690 V rated value - at 400 V rated value - at 690 V	— at 400 V rated value	37 kW
- at 1000 V rated value • at AC-3e - 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 • 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 • 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 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 • 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 t	— at 500 V rated value	45 kW
at AC-3e — at 230 V rated value — at 400 V rated value — at 690 V rated value — at 1000 V rated value — at 1000 V rated value — at 1000 V rated value — at 690 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value — at 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=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 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 • 1500 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum • limited to 50 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 690 V rated value	55 kW
- at 230 V rated value - at 400 V rated value - at 500 V rated value - at 690 V rated value - at 1000 V rated value - at 400 V rated value - at 400 V rated value - at 690 V for current peak value n=20 rated value - at 690 V for current peak value n=20 rated value - at 690 V for current peak value n=20 rated value - at 690 V for current peak value n=20 rated value - at 690 V for current peak value n=20 rated value - at 690 V for current peak value n=30 rated value - at 690 V for current p	— at 1000 V rated value	37 kW
- at 400 V rated value - at 500 V rated value - at 500 V rated value - at 690 V rated value - at 1000 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 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 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	• at AC-3e	
- at 500 V rated value - at 690 V rated value - at 1000 V rated value - at 1000 V rated value - at 1000 V rated value operating power for approx. 200000 operating cycles at AC-4 • at 400 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 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 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 • limited to 1 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 50 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 230 V rated value	
- at 690 V rated value - at 1000 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 • 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 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 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 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 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 400 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 400 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 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 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 500 V for surrent peak value n=30 rated value • up to 500 V for surrent 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 10 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 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		
operating power for approx. 200000 operating cycles at AC-4 • 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=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 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 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 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		
at 400 V rated value 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 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 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 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 in cold operating state up to 40 °C ilmited 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 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		37 kW
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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 30 s switching at zero current maximum ■ limited to 60 s switchin		
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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 538 A; Use minimum cross-section acc. to AC-1 rated value 423 A; Use minimum cross-section acc. to AC-1 rated value 	 limited to 5 s switching at zero current maximum 	1 186 A; Use minimum cross-section acc. to AC-1 rated value
• limited to 60 s switching at zero current maximum 10	 limited to 10 s switching at zero current maximum 	851 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	 limited to 30 s switching at zero current maximum 	538 A; Use minimum cross-section acc. to AC-1 rated value
	limited to 60 s switching at zero current maximum	423 A; Use minimum cross-section acc. to AC-1 rated value
a at AC	no-load switching frequency	
♥ at AO	• at AC	5 000 1/h
operating frequency	operating frequency	
• at AC-1 maximum 900 1/h	• at AC-1 maximum	900 1/h

• at AC-2 maximum	400 1/h
• at AC-3 maximum	1 000 1/h
• at AC-3e maximum	1 000 1/h
at AC-4 maximum	300 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
at 50 Hz rated value	110 V
at 60 Hz rated value	110 V
operating range factor control supply voltage rated value of magnet coil at AC	
● at 50 Hz	0.8 1.1
● at 60 Hz	0.85 1.1
apparent pick-up power of magnet coil at AC	
● at 50 Hz	348 VA
● at 60 Hz	296 VA
inductive power factor with closing power of the coil	
● at 50 Hz	0.62
● at 60 Hz	0.55
apparent holding power of magnet coil at AC	
● at 50 Hz	25 VA
● at 60 Hz	18 VA
inductive power factor with the holding power of the coil	
● at 50 Hz	0.35
● at 60 Hz	0.41
closing delay	
• at AC	13 50 ms
opening delay	
• at AC	10 21 ms
arcing time	10 20 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous contact	1
number of NO contacts for auxiliary contacts instantaneous	
contact	1
	1 10 A
contact	
contact operational current at AC-12 maximum	
contact operational current at AC-12 maximum operational current at AC-15	10 A
contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value	10 A 6 A
contact operational current at AC-12 maximum 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	10 A 6 A 3 A
contact operational current at AC-12 maximum 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 operational current at DC-12	10 A 6 A 3 A 2 A 1 A
contact operational current at AC-12 maximum 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 operational current at DC-12 • at 24 V rated value	10 A 6 A 3 A 2 A 1 A
contact operational current at AC-12 maximum 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 operational current at DC-12 • at 24 V rated value • at 48 V rated value	10 A 6 A 3 A 2 A 1 A
contact operational current at AC-12 maximum 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 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	10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A
contact operational current at AC-12 maximum 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 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	10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A
contact operational current at AC-12 maximum 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 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 110 V rated value • at 125 V rated value	10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A
contact operational current at AC-12 maximum 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 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	10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A
contact operational current at AC-12 maximum 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 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	10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A
contact operational current at AC-12 maximum 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 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	10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A
contact operational current at AC-12 maximum 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 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 600 V rated value • at 220 V rated value	10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A
contact operational current at AC-12 maximum 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 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 24 V rated value • at 24 V rated value • at 48 V rated value	10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A
contact operational current at AC-12 maximum 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 operational current at DC-12 • at 24 V rated value • at 48 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 operational current at DC-13 • at 24 V rated value • at 60 V rated value • at 60 V rated value • at 60 V rated value	10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A
contact operational current at AC-12 maximum 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 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 220 V rated value • at 600 V rated value • at 110 V rated value	10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A
contact operational current at AC-12 maximum 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 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 220 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 125 V rated value • at 600 V rated value • at 125 V rated value	10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 2 A 1 A 0.9 A
contact operational current at AC-12 maximum 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 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 600 V rated value • at 148 V rated value • at 148 V rated value • at 150 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value	10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 2 A 1 A 0.9 A 0.3 A
contact operational current at AC-12 maximum 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 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 600 V rated value • at 148 V rated value • at 155 V rated value • at 110 V rated value • at 220 V rated value • at 220 V rated value • at 320 V rated value	10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 2 A 1 A 0.9 A 0.3 A 0.1 A
contact operational current at AC-12 maximum 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 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 600 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 48 V rated value • at 48 V rated value • at 220 V rated value • at 600 V rated value • at 125 V rated value	10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 2 A 1 A 0.9 A 0.3 A
contact operational current at AC-12 maximum 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 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 600 V rated value • at 220 V rated value • at 48 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 125 V rated value • at 600 V rated value	10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 2 A 1 A 0.9 A 0.3 A 0.1 A
contact operational current at AC-12 maximum 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 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 600 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 48 V rated value • at 48 V rated value • at 220 V rated value • at 600 V rated value • at 125 V rated value	10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 2 A 1 A 0.9 A 0.3 A 0.1 A

* at 800 Y rated value		
yelded mechanical performance [hg] • for anging-phase AC motor — at 1701/25V stack value — at 2200/25V stack value — at 2200/25V stack value — at 200/25V stack value — at 200/25V stack value — at 400/45V value value — at 5700/50V value value — at 5700/50V value value — at 5700/50V value value — on 5700V value value — on 5700V value value — with type of auxiliary contacts according to UL Short circuit protection of the main crouit — with type of a signment 2 required — with type of coordination 1 required — with type of a signment 2 required — side by-side mounting (dimensions fastering method — side by-side mounting — with side-y-side mounting — with side-y-side mounting — with side-y-side mounting — with side-y-side mounting — one owners — ownwards — ownward	at 480 V rated value	77 A
* of single-phase AC motor — at 1200 V rated value		62 A
	 for single-phase AC motor 	
• for 3-phase AC motor — at 200208 V rated value — at 200208 V rated value — at 200208 V rated value — at 257600 V rated value — at 257600 V rated value — at 257600 V rated value — on the foreign contects according to UL ASOU / P800 Short-circuit protection design of the fuse link • 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 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 fasterning method • created protection of the auxiliary switch required fasterning method • clade-by-side mounting • for writing and the state of the switch auxiliary switch required fasterning method • clade-by-side mounting • for writing and the state of the switch auxiliary switch required fasterning method • clade-by-side mounting • for writing and the state of the switch auxiliary switch required fasterning method • clade-by-side mounting • for many state of the switch auxiliary switch required fasterning method • clade-by-side mounting • for many state of the switch auxiliary switch required fasterning method • for prounded parts	— at 110/120 V rated value	7.5 hp
at 220/2280 V rated value	— at 230 V rated value	15 hp
at 220/230 V risted value	 for 3-phase AC motor 	
at 480/480 V rated value	 at 200/208 V rated value 	25 hp
at 575/000 V raled value contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link with type of coordination 1 required with type of coordination 2 required or short oricuit 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 forwards upwards downwards at the side downwards at the side downwards downwards downwards forwards upwards forwards upwards forwards downwards downwards downwards forwards downwards downwards forwards forwards downwards forwards forwards forwards downwards forwards forwards downwards forwards	 at 220/230 V rated value 	30 hp
Short-circuit protection Short-circuit protection Short-circuit protection Short-circuit protection of the main circuit	— at 460/480 V rated value	60 hp
Short-circuit protection design of the fuse link - with type of condination 1 required - with type of assignment 2 required - with type of assignment 2 required - of enfort-circuit protection of the auxiliary switch required Installation mounting/dimensions mounting position fastening method - side-by-side mounting Yes sorew and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 - side-by-side mounting Yes sorew and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 - side-by-side mounting Yes - with side-by-side mounting - forwards - upwards - downwards - or main current circuit - of orwards - ownwards - or main current circuit - downwards - or main current circuit - or main current circuit - or man current circuit - or magnet coil type of connectable conductor cross-section for main contacts - finely stranded with core and processing - finely stranded with core and processing	— at 575/600 V rated value	60 hp
design of the fuse link • for short-circuit protection of the main circuit — with type of assignment 2 required — of reshort-circuit protection of the auxiliary switch required Installation/ munoriting/ dimensions mounting position — #./180* rotation possible on vertical mounting surface; can be tilted forward and backward by #-2.5 for overtical mounting surface; can be tilted forward and backward by #-2.5 for overtical mounting surface; can be tilted forward and backward by #-2.5 for overtical mounting surface; can be tilted forward and backward by #-2.5 for overtical mounting surface; can be tilted forward and backward by #-2.5 for overtical mounting surface; can be tilted forward and backward by #-2.5 for overtical mounting surface; can be tilted forward and backward by #-2.5 for overtical mounting surface; can be tilted forward and backward by #-2.5 for overtical mounting surface; can be tilted forward and backward by #-2.5 for overtical mounting surface; can be tilted forward and backward by #-2.5 for overtical mounting surface; can be tilted forward and backward by #-2.5 for overtical mounting surface; can be tilted forward and backward by #-2.5 for overtical mounting surface; can be tilted forward and backward by #-2.5 for overtical mounting surface; can be tilted forward and backward by #-2.5 for overtical mounting surface; can be tilted forward and backward by #-2.5 for overtical mounting surface; can be tilted forward and backward by #-2.5 for overtical mounting surface; can be tilted forward and backward by #-2.5 for overtical mounting surface; can be tilted forward and backward by #-2.5 for overtical mounting surface; can be tilted forward and backward by #-2.5 for overtical mounting surface; can be tilted forward and backward by #-2.5 for mounting surface; can be tilted forward and backward by #-2.5 for mo	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 coordination 1 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 • 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 • 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 • for short-circuit protection of the auxiliary switch required • for stephen switch	Short-circuit protection	
- with type of assignment 2 required	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 mounting position ##-180* rotation possible on vertical mounting surface; can be tilted forward and backward by 4: 22.5* on vertical mounting surface; can be tilted forward and backward by 4: 22.5* on vertical mounting surface; can be tilted forward and backward by 4: 22.5* on vertical mounting surface; can be tilted forward and backward by 4: 22.5* on vertical mounting surface; can be tilted forward and backward by 4: 22.5* on vertical mounting surface; can be tilted forward and backward by 4: 22.5* on vertical mounting surface; can be tilted forward and backward by 4: 22.5* on vertical mounting surface; can be tilted forward and backward by 4: 22.5* on vertical mounting surface; can be tilted forward and backward by 4: 22.5* on vertical mounting surface; can be tilted forward and backward by 4: 22.5* on vertical mounting surface; can be tilted forward and backward by 4: 22.5* on vertical mounting surface; can be tilted forward and backward by 4: 22.5* on vertical mounting surface; can be tilted forward and backward by 4: 22.5* on million to surface and surf	 for short-circuit protection of the main circuit 	
- with type of assignment 2 required	 — 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
Installation mounting dimensions Marchaelian Marchael		kA)
instaliation/ mounting dimensions mounting position ##.180" rotation possible 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 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 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 ##. 20 mm ##.100 mm ##.100 mm ##.100 mm #.100 mm ##.100 mm	 — with type of assignment 2 required 	gG: 160A (690V,100kA), aM: 80A (690V,100kA), BS88: 125A (415V,80kA)
Mounting position		gG: 10 A (500 V, 1 kA)
backward by +- 22.5" on vertical mounting surface screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 vidth	Installation/ mounting/ dimensions	
screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 • side-by-side mounting width yes 140 mm width 70 mm depth 152 mm required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — upwards — upwards — 10 mm — at the side • for grounded parts — upwards — 10 mm • at the side • for ilve parts — downwards — 10 mm • for live parts — forwards — upwards — 10 mm • for live parts — forwards — upwards — 10 mm • for live parts — upwards — 10 mm • for live parts — forwards — upwards — 10 mm • for live parts — forwards — upwards — 10 mm • for live parts — forwards — upwards — 10 mm • for live parts — of manufactor for incident of the side — downwards — of manufactor for auxiliary contacts • of magnet coil ype of connectable conductor cross-sections for main contacts • finely stranded with core end processing connectable conductor cross-section for mailiary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • finely stranded • finely stranded • finely stranded • finely stranded •	mounting position	
e side-by-side mounting height width 70 mm depth required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • of grounded parts — for grounded parts — the side — downwards — 10 mm — at the side — downwards — 10 mm — of rive parts — forwards — upwards — forwards — upwards — 10 mm — of main current circuit — downwards — 10 mm — at the side — 10 mm — of main current circuit — at the side — the side — the side — of main current circuit — of a vaxiliary and contol circuit — of a vaxiliary and contol circuit — at contactor for auxiliary contacts — finely stranded with core end processing connectable conductor cross-section for main contacts — solid — stranded — finely stranded with core end processing connectable conductor cross-section for auxiliary contacts — solid or stranded — finely stranded with core end processing connectable conductor cross-section for auxiliary contacts — solid or stranded — finely stranded with core end processing connectable conductor cross-section for auxiliary contacts — solid or stranded — finely stranded with core end processing — for auxiliary contacts — for auxiliary cont		, ·
Neight 140 mm 70 mm 6	_	
width 70 mm depth 152 mm required spacing • with side-by-side mounting - forwards 20 mm - upwards 10 mm - downwards 10 mm - at the side 0 mm - upwards 10 mm - upwards 10 mm - at the side 10 mm - downwards 10 mm • for live parts 20 mm - upwards 10 mm - downwards 10 mm - at the side 10 mm Connections/ Terminals type of electrical connection screw-type terminals • for auxiliary accontrol circuit screw-type terminals • for auxiliary contacts screw-type terminals • of magnet coil Screw-type terminals type of connectable conductor cross-section for main contacts soild • finely stranded with core end processing 2.5 36 mm²), 1x (2.5 50 mm²) connectable conductor cross-section for auxiliary contacts soild or stranded • finely stranded with core end processing 0.5 2.5 mm² connectable conductor cross-sections<		
required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — upwards — 10 mm • for grounded parts — upwards — upwards — 10 mm — at the side — upwards — 10 mm — at the side — upwards — 10 mm — downwards — 10 mm — odwnwards — of live parts — forwards — upwards — upwards — 10 mm — at the side — upwards — 10 mm — to main unit of live parts — forwards — upwards — upwards — 10 mm — at the side — to main unit of live parts — for auxiliary and control circuit • for auxiliary and control circuit • for auxiliary contacts • of magnet coil type of connectable conductor cross-section for main contacts • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-sections • for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-sections • for auxiliary contacts	height	140 mm
required spacing with side-by-side mounting — forwards — upwards — downwards — downwards — at the side • for grounded parts — forwards — upwards — upwards — upwards — upwards — upwards — upwards — downwards — downwards — at the side — downwards — at the side — downwards — for live parts — forwards — upwards — to mm — at the side — downwards — upwards — solde — solde thire limits — to mm — at the side — to mm — at the side — to mm — at the side — to mm — at the side — to mm — at the side — to mm — at the side — to mm — at the side — to mm — at the side — to mm — at the side — to mm — at the side — to mm — at the side — to mm — at the side — to mm — at the side — to mm — at the side — to mm — at the side — to mm — at the side — to mm — at the side — to mm — at the side — to mm — at the side — to mm — at the side —	width	70 mm
 with side-by-side mounting forwards upwards downwards 10 mm downwards at the side 0 mm for grounded parts upwards upwards upwards upwards 10 mm at the side 10 mm downwards 10 mm for live parts forwards upwards 10 mm downwards 10 mm downwards 10 mm downwards 10 mm for a upwards at the side 10 mm for main current circuit 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 if nelly stranded with core end processing solid stranded finely stranded with core end processing connectable conductor cross-section for main contacts solid or stranded finely stranded with core end processing connectable conductor cross-section for auxiliary contacts finely stranded with core end processing finely stranded with core end processing finely stranded with core end processing finely stranded finely stranded with core end processing finely stranded finely stranded finely stranded with core end processing for auxiliary contacts 	depth	152 mm
forwards 20 mm upwards 10 mm downwards 0 mm at the side 0 mm forwards 20 mm upwards 10 mm at the side 10 mm downwards 10 mm forwards 20 mm upwards 10 mm forwards 10 mm forwards 10 mm downwards 10 mm at the side 50 mm upwards 10 mm at the side 50 mm	required spacing	
- upwards - downwards - at the side • for grounded parts - forwards - upwards - upwards - upwards - at the side - downwards - at the side - downwards • for live parts - forwards - upwards - forwards - upwards - forwards - upwards - downwards - upwards - upwards - upwards - upwards - upwards - downwards - at the side - downwards - at the side - downwards - at the side - to 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 • shiely stranded with core end processing - solid - stranded - finely stranded with core end processing - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - for auxiliary contacts - solid or stranded - finely stranded with core end processing - for auxiliary contacts - solid or stranded - finely stranded with core end processing - for auxiliary contacts	with side-by-side mounting	
- downwards - at the side • for grounded parts - forwards - upwards - upwards - at the side - downwards - downwards - for live parts - forwards - upwards - forwards - forwards - forwards - forwards - forwards - forwards - upwards - forwards - upwards - upwards - upwards - downwards - upwards - downwards - downwards - downwards - at the side - to mm	— forwards	20 mm
- at the side • for grounded parts - forwards - upwards - at the side - downwards • for live parts - forwards - upwards - upwards - upwards - forwards - upwards - downwards 10 mm - downwards 10 mm - downwards - upwards - downwards - at the side 10 mm - downwards - at the side 10 mm - downwards - or at the side Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • of magnet coil type of connectable conductor cross-sections for main contacts • finely stranded with core end processing connectable conductor cross-section for main contacts • solid • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-sections • for auxiliary contacts	— upwards	10 mm
• for grounded parts — forwards — upwards — at the side — downwards • for live parts — forwards — upwards — upwards — to many and selections * for auxiliary and control circuit — for auxiliary and control circuit — to many and control circuit — to for auxiliary and control circuit — to for auxiliary and control circuit — to for auxiliary contacts — of magnet coil type of connectable conductor cross-sections for main contacts — solid — stranded — finely stranded with core end processing — to many and selections —	— downwards	10 mm
forwards 20 mm upwards 10 mm at the side 10 mm downwards 10 mm • for live parts forwards 20 mm upwards 10 mm downwards 50 mm at the side 50 mm	— at the side	0 mm
- upwards 10 mm - at the side 10 mm - downwards 10 mm • for live parts - forwards 20 mm - upwards 10 mm - downwards 10 mm - downwards 10 mm - downwards 10 mm - downwards 10 mm - at the side 10 mm - at the side 10 mm Connections/ Terminals type of electrical connection • for main current circuit screw-type terminals • at contactor for auxiliary and control circuit screw-type terminals • at contactor for auxiliary contacts Screw-type terminals • of magnet coil Screw-type terminals • finely stranded with core end processing 2x (2.5 35 mm²), 1x (2.5 50 mm²) connectable conductor cross-section for main contacts • finely stranded with core end processing 2.5 50 mm² connectable conductor cross-section for auxiliary contacts • solid 5 2.5 mm² • finely stranded with core end processing 0.5 2.5 mm² type of connectable conductor cross-sections • for auxiliary contacts	 for grounded parts 	
- at the side	— forwards	20 mm
- downwards • for live parts - forwards - upwards - upwards - 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-section for main contacts • finely stranded with core end processing • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts	— upwards	10 mm
• for live parts — forwards — upwards — downwards — at the side Connections/ Terminals type of electrical connection • for auxiliary and control circuit • at contactor for auxiliary contacts • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing for auxiliary contacts • for auxiliary contacts • for auxiliary contacts	— at the side	10 mm
- forwards 20 mm - upwards 10 mm - downwards 10 mm - at the side 10 mm Connections/ Terminals type of electrical connection • for main current circuit screw-type terminals • at contactor for auxiliary and control circuit screw-type terminals • of magnet coil Screw-type terminals • of magnet coil Screw-type terminals type of connectable conductor cross-sections for main contacts • finely stranded with core end processing 2x (2.5 35 mm²), 1x (2.5 50 mm²) connectable conductor cross-section for main contacts • solid 2.5 16 mm² • stranded 6 70 mm² • finely stranded with core end processing 2.5 50 mm² connectable conductor cross-section for auxiliary contacts • solid or stranded 0.5 2.5 mm² • finely stranded with core end processing 0.5 2.5 mm² type of connectable conductor cross-sections • finely stranded with core end processing 0.5 2.5 mm²	— downwards	10 mm
- upwards - downwards - at the side 10 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-section for main contacts • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • finely stranded with core end processing connectable conductor cross-section for main contacts • solid • stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid of inely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid of stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts	• for live parts	
- downwards 10 mm - at the side 10 mm Connections/ Terminals type of electrical connection • for main current circuit screw-type terminals • at contactor for auxiliary contacts Screw-type terminals • of magnet coil Screw-type terminals type of connectable conductor cross-sections for main contacts • finely stranded with core end processing 2x (2.5 35 mm²), 1x (2.5 50 mm²) connectable conductor cross-section for main contacts • solid 2.5 16 mm² • stranded 6 70 mm² • finely stranded with core end processing 2.5 50 mm² connectable conductor cross-section for auxiliary contacts • solid or stranded 0.5 2.5 mm² • finely stranded with core end processing 0.5 2.5 mm² type of connectable conductor cross-sections • for auxiliary contacts	— forwards	20 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-section for main contacts • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • solid • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts	— upwards	10 mm
	·	10 mm
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 • finely stranded with core end processing • stranded • finely stranded with core end processing connectable conductor cross-section for main contacts • solid • stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts		
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 • solid • stranded • stranded with core end processing connectable conductor cross-section for auxiliary contacts • finely stranded with core end processing connectable conductor cross-section for main contacts • solid • stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • for auxiliary contacts		
• 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 • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • finely stranded • finely stranded • finely stranded • finely stranded • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts		
• for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections for main contacts • finely stranded with core end processing connectable conductor cross-section for main contacts • solid • stranded • finely stranded with core end processing • finely stranded • finely stranded • finely stranded • finely stranded with core end processing • for auxiliary contacts	•	screw-type terminals
 at contactor for auxiliary contacts of magnet coil type of connectable conductor cross-sections for main contacts finely stranded with core end processing solid stranded stranded finely stranded with core end processing 2.5 16 mm² stranded finely stranded with core end processing finely stranded with core end processing solid or stranded finely stranded with core end processing connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing finely stranded with core end processing finely stranded with core end processing for auxiliary contacts 		
 of magnet coil Screw-type terminals type of connectable conductor cross-sections for main contacts finely stranded with core end processing 2x (2.5 35 mm²), 1x (2.5 50 mm²) connectable conductor cross-section for main contacts solid stranded stranded finely stranded with core end processing connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing finely stranded with core end processing finely stranded with core end processing for auxiliary contacts for auxiliary contacts 	•	•
type of connectable conductor cross-sections for main contacts • finely stranded with core end processing connectable conductor cross-section for main contacts • solid • stranded • stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts	•	
 finely stranded with core end processing 2x (2.5 35 mm²), 1x (2.5 50 mm²) connectable conductor cross-section for main contacts solid stranded finely stranded with core end processing connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing finely stranded with core end processing finely stranded with core end processing for auxiliary contacts for auxiliary contacts 		on type terminals
connectable conductor cross-section for main contacts • solid • stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing 0.5 2.5 mm² type of connectable conductor cross-sections • for auxiliary contacts	•	2v /2 5 35 mm²\ 1v /2 5 50 mm²\
solid stranded stranded finely stranded with core end processing connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts		ZA (Z.J JJ HIIII), TA (Z.J JU HIIII ⁻)
 stranded finely stranded with core end processing connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts 		2.5 16 mm²
 finely stranded with core end processing connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts 		
connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts		
 solid or stranded finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts 0.5 2.5 mm² 0.5 2.5 mm²		2.5 50 mm²
 • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts 	-	
type of connectable conductor cross-sections • for auxiliary contacts	solid or stranded	
• for auxiliary contacts		0.5 2.5 mm ²
	type of connectable conductor cross-sections	
— solid or stranded 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	• for auxiliary contacts	
	— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)

 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 for AWG cables for auxiliary contacts 	2x (20 16), 2x (18 14)
AWG number as coded connectable conductor cross section	
• for main contacts	10 2
 for auxiliary contacts 	20 14
Safety related data	
product function	
 mirror contact according to IEC 60947-4-1 	Yes
 positively driven operation according to IEC 60947-5-1 	No
suitability for use safety-related switching OFF	Yes
B10 value with high demand rate according to SN 31920	1 000 000
proportion of dangerous failures	
 with low demand rate according to SN 31920 	40 %
 with high demand rate according to SN 31920 	73 %
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
T1 value for proof test interval or service life according to IEC 61508	20 a
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
Certificates/ approvals	

General Product Approval





Confirmation



<u>KC</u>



|--|



Type Examination Cer**tificate**





Type Test Certificates/Test Report

Special Test Certific-<u>ate</u>

Marine / Shipping













other	Railway	Dangerous Good	Environment

Confirmation Vibration and Shock **Transport Information Environmental Confirmations**

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

om/mall/en/en/Catalog/product?mlfb=3RT2045-1AG20

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2045-1AG20

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2045-1A

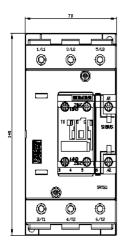
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax de.aspx?mlfb=3RT2045-1AG20&lang=en

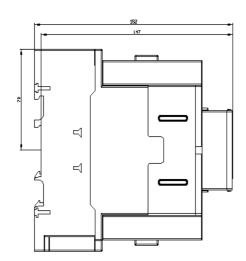
Characteristic: Tripping characteristics, I2t, Let-through current

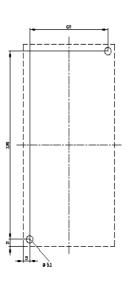
https://support.industry.siemens.com/cs/ww/en/ps/3RT2045-1AG20/char

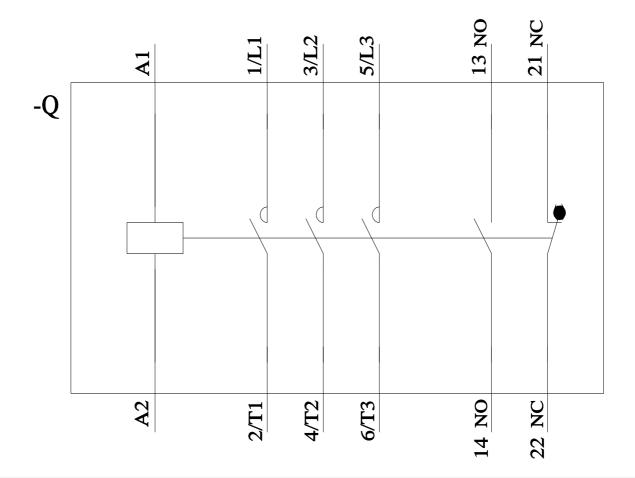
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2045-1AG20&objecttype=14&gridview=view1









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