3RT2045-1AP00-1AA0

Data sheet



power contactor, AC-3e/AC-3, 80 A, 37 kW / 400 V, 3-pole, 230 V AC, 50 Hz, auxiliary contacts: 1 NO + 1 NC, screw terminal, size: S3, upright mounting position

product brand name product type designation product type designation 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 per pole • of main circuit with degree of pollution 3 rated value • of auxiliary circuit rated value aximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse • at AC shock resistance with sine pulse • at AC to 39 / 5 ms, 6, g / 10 ms mechanical service life (operating cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical	
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 • without load current share typical 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 auxiliary circuit rated value • of auxiliary circuit rated value maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse • at AC shock resistance with sine pulse • at AC shock resistance with sine pulse • at AC shock resistance with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical	
Size of contactor Signature Signatur	
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·	
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 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 500 V rated value — at 400 V rated value — at 600 V rated value — at 800 V rated value — at 900 V rated value — at 800 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 680 V rated value 37 kW - at 400 V rated value 37 kW - at 580 V rated value 37 kW - at 900 V rated value 38 kW - at 900 V rated value 38 kW - at 900 V rated value 39 kW - at 900 V rated value 30 V rated value 40 V ro current peak value n=20 rated value 40 V ro current peak value n=20 rated value 40 V ro current peak value n=20 rated value 40 V ro current peak value n=20 rated value 40 V ro current peak value n=20 rated value 40 V ro current peak value n=20 rated value 40 V ro vo for current peak value n=20 rated value 40 V ro vo for current peak value n=30 rated value 40 V ro to 50 V for current peak value n=30 rated value 40 V ro to 50 V for current peak value n=30 rated value 40 V ro to 50 V for current peak value n=30 rated value 40 V ro to 50 V for current peak value n=30 rated value 40 V ro to 50 V for current peak value n=30 rated value 40 V ro to 50 V for current peak value n=30 rated value 40 V ro to 50 V for current peak value n=30 rated value 40 V ro to 50 V for current peak value n=30 rated value 40 V ro to 50 V for current peak value n=30 rated value 40 V ro to 50 V for current peak value n=30	— 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 66 f kVA 67 kVA 68 kVA 68 kVA 69 kVA	— 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 • 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 • 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 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	— at 400 V rated value	
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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

1400	400 4/1
• 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	000 V
at 50 Hz rated value	230 V
operating range factor control supply voltage rated value of magnet coil at AC	
● at 50 Hz	0.8 1.1
apparent pick-up power of magnet coil at AC • at 50 Hz	296 VA
inductive power factor with closing power of the coil	
● at 50 Hz	0.61
apparent holding power of magnet coil at AC	
● at 50 Hz	19 VA
inductive power factor with the holding power of the coil	
● at 50 Hz	0.38
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
operational current at AC-12 maximum	10 A
operational current at AC-15	
 at 230 V rated value 	6 A
 at 400 V rated value 	3 A
 at 500 V rated value 	2 A
• at 690 V rated value	1 A
operational current at DC-12	
• at 24 V rated value	10 A
• at 48 V rated value	6.4
• at 60 V rated value	6 A
at 110 V rated valueat 125 V rated value	3 A 2 A
at 125 V rated value at 220 V rated value	1.4
at 220 V rated valueat 600 V rated value	1 A 0.15 A
operational current at DC-13	V.10 A
at 24 V rated value	10 A
at 24 V rated value at 48 V rated value	2 A
at 40 V rated value at 60 V rated value	2 A
at 100 V rated value at 110 V rated value	1A
at 110 V rated value at 125 V rated value	0.9 A
at 123 V rated value at 220 V rated value	0.3 A
at 600 V rated value	0.1 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	77 A
at 600 V rated value	62 A
yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V rated value	7.5 hp
— at 230 V rated value	15 hp
at 200 V latea value	10 116

(0)	
• for 3-phase AC motor	
— at 200/208 V rated value	25 hp
— at 220/230 V rated value	30 hp
— at 460/480 V rated value	60 hp
— at 575/600 V rated value	60 hp
contact rating of auxiliary contacts according to UL	A600 / P600
Short-circuit protection	
design of the fuse link	
 for short-circuit protection of the main circuit 	
— with type of coordination 1 required	gG: 250 A (690 V, 100 kA), aM: 160 A (690 V, 100 kA), BS88: 200 A (415 V, 80 kA)
 — with type of assignment 2 required 	gG: 160A (690V,100kA), aM: 80A (690V,100kA), BS88: 125A (415V,80kA)
 for short-circuit protection of the auxiliary switch required 	gG: 10 A (500 V, 1 kA)
Installation/ mounting/ dimensions	
mounting position	standing, on horizontal mounting surface
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
side-by-side mounting	Yes
height	140 mm
width	70 mm
depth	152 mm
required spacing	
with side-by-side mounting	
— forwards	20 mm
— upwards	10 mm
— downwards	10 mm
— downwards — at the side	0 mm
	O mm
for grounded parts	
— forwards	20 mm
— upwards	10 mm
— at the side	10 mm
— downwards	10 mm
for live parts	
— 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
for auxiliary and control circuit	screw-type terminals
at contactor for auxiliary contacts	Screw-type terminals
of magnet coil	Screw-type terminals
type of connectable conductor cross-sections for main contacts	
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 mm ²
connectable conductor cross-section for auxiliary contacts	50 Hill
solid or stranded	0.5 2.5 mm²
	0.5 2.5 mm²
finely stranded with core end processing type of connectable conductor cross-sections	0.0 2.0 IIIII
type of connectable conductor cross-sections	
for auxiliary contacts colid or stranded	2v (0 F 1 F mm²) 2v (0 7F 2 F mm²)
— 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 Safety related data	10 2 20 14

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
Cartificates/approvals	

Certificates/ approvals

General Product Approval



Confirmation





<u>KC</u>



Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates
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Type Examination Certificate





Type Test Certificates/Test Report

Special Test Certificate

Marine / Shipping













other	Railway	Dangerous Good	Environment
Confirmation	Vibration and Shock	Transport Information	Environmental Confirmations

Further information

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)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2045-1AP00-1AA0

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT2045-1AP00-1AA0}\\$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2045-1AP00-1AA0

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

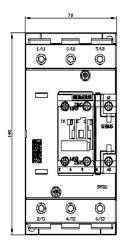
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2045-1AP00-1AA0&lang=en

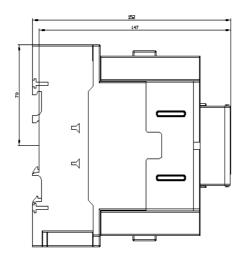
Characteristic: Tripping characteristics, I2t, Let-through current

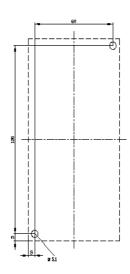
https://support.industry.siemens.com/cs/ww/en/ps/3RT2045-1AP00-1AA0/char

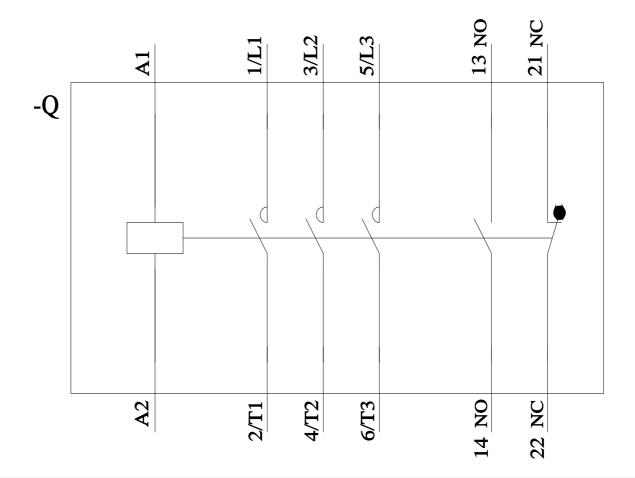
Further characteristics (e.g. electrical endurance, switching frequency)

 $\underline{\text{http://www.automation.siemens.com/bilddb/index.aspx?view=Search\&mlfb=3RT2045-1AP00-1AA0\&objecttype=14\&gridview=view1}$









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