SIEMENS

Data sheet

3RT2045-3AK60



power contactor, AC-3e/AC-3, 80 A, 37 kW / 400 V, 3-pole, 110 V AC, 50 Hz / 120 V, 60 Hz, auxiliary contacts: 1 NO + 1 NC, main circuit: screw terminal, control and auxiliary circuit: spring-loaded terminal, size: S3

product brand name	SIRIUS
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 	22 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 coil and main contacts according to EN 60947-1	690 V
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 maximum	95 %
Main circuit	
number of poles for main current circuit	3

number of NO contacts for main contacts	3
operating voltage	
at AC-3 rated value maximum	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 value 	125 A
— 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	
— 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-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 mm²
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
— at 220 V rated value	10 A
— at 440 V rated value	1.8 A
— at 600 V rated value	1 A
 with 3 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
— at 220 V rated value	80 A
— at 440 V rated value	4.5 A

at 80 V miles value 228 A - at 81 V rates value 400 A - at 81 V rates value 40 A - at 80 V rates value 50 C S - at 80 V rates value 50 C C S - at 80 V rates value 50 C S - at 80 V rates value 50 C S - at 80 V rates value 50 C C S - at 80 V rates value 50 C C S - at 80 V rates value 50 C C C S - at 80 V rates value 50 C C C S - at 80 V rates value 50 C C C C S - at 80 V rates value 50 C C C C C C C C C C C C C C C C C C		
	— at 600 V rated value	2.6 A
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# 220 V rade value1 A # 120 V rade value006 A # 120 V rade value100 A # 120 V rade value100 A # 120 V rade value100 A # 120 V rade value000 A # 120 V rade value020 A		
→ e80 V rated value 0.06 Å → with 2 current paths in series at DC-3 at DC-3 0.01 Å → at 34 V vited value 0.00 Å → at 60 V vited value 0.10 Å → at 60 V vited value 0.10 Å → at 60 V vited value 0.00 Å → at 60 V vited value 2.10 Vited value → at 60 V vited value 2.10 Vited value → at 60 V vited value 2.10 Vited value → at 60 V vited value 2.10 Vited value → at 60 V vited value 2.10 Vited value → at 60 V vited value 2.10 Vited value		
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- at 24 Vrated value100 A- at 110 Vrated value100 A- at 220 Vrated value00 A- at 220 Vrated value00 A- at 420 Vrated value0.22 A- at 600 Vrated value0.16 A- at 600 Vrated value100 A- at 724 Vrated value100 A- at 724 Vrated value100 A- at 724 Vrated value00 A- at 724 Vrated value0.9 A- at 725 Vrated value25 A- at 725 Vrated value25 A- at 725 Vrated value25 AW- at 726 Vrated value37 AW- at 727 Vrated value25 AW- at 728 Vrated value37 AW- at 729 Vrated value37 AW- at 720 Vrated value <td></td> <td>0.06 A</td>		0.06 A
• with 3 current path in series at DC-3 at DC-5		
		0.16 A
		400 A
at 800 V rated value0.35 Åoperating power37 kW- at 230 V rated value37 kW- at 230 V rated value22 kW- at 400 V rated value37 kW- at 600 V rated value37 kW- at 600 V rated value45 kW- at 600 V rated value55 kW- at 600 V rated value55 kW- at 700 V rated value55 kW- at 700 V rated value22 kW- at 700 V rated value37 kW- at 600 V rated value21 kW• up to 230 V for current pask value n=20 rated value69 kVA• up to 230 V for current pask value n=20 rated value69 kVA• up to 630 V for current pask value n=30 rated value60 kVA• up to 630 V for current pask value n=30 rated value51 kVA• up to 630 V for current pask value n=30 rated value43 k kVA• up to 630 V for current pask value n=30 rated value53 k kVA• u		
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• up to 400 V for current peak value n=30 rated value37.4 kVA• up to 500 V for current peak value n=30 rated value46.7 kVA• up to 690 V for current peak value n=30 rated value64.5 kVA• short-time withstand current in cold operating state up to 40 °C1500 A; Use minimum cross-section acc. to AC-1 rated value• limited to 1 s switching at zero current maximum1 500 A; Use minimum cross-section acc. to AC-1 rated value• limited to 5 s switching at zero current maximum851 A; Use minimum cross-section acc. to AC-1 rated value• limited to 30 s switching at zero current maximum538 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum538 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum538 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum530 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum530 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum530 A; Use minimum cross-section acc. to AC-1 rated value• at AC5000 1/h		
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40 °C • limited to 1 s switching at zero current maximum 1 500 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 10 s switching at zero current maximum 851 A; Use minimum cross-section acc. to AC-1 rated value • 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 • limited to 60 s switching frequency 423 A; Use minimum cross-section acc. to AC-1 rated value • at AC 5 000 1/h operating frequency 5 000 1/h		04.0 KVA
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• 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 no-load switching frequency 5 000 1/h • at AC 5 000 1/h	 limited to 5 s switching at zero current maximum 	1 186 A; Use minimum cross-section acc. to AC-1 rated value
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no-load switching frequency 5 000 1/h • at AC 5 000 1/h	 limited to 30 s switching at zero current maximum 	538 A; Use minimum cross-section acc. to AC-1 rated value
• at AC 5 000 1/h	 limited to 60 s switching at zero current maximum 	423 A; Use minimum cross-section acc. to AC-1 rated value
operating frequency	no-load switching frequency	
	• at AC	5 000 1/h
• at AC-1 maximum 900 1/h	operating frequency	
	● 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	120 V
operating range factor control supply voltage rated value of magnet coil at AC	
● at 50 Hz	0.8 1.1
• at 60 Hz	0.8 1.1
apparent pick-up power of magnet coil at AC	
● at 50 Hz	326 VA
• at 60 Hz	326 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	22 VA
• at 60 Hz	22 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.36
• at 60 Hz	0.4
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	
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact	1
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact	1
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum	
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15	1 10 A
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value	1 10 A 6 A
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value	1 10 A 6 A 3 A
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value	1 10 A 6 A 3 A 2 A
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value	1 10 A 6 A 3 A
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 690 V rated value	1 10 A 6 A 3 A 2 A 1 A
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 24 V rated value	1 10 A 6 A 3 A 2 A 1 A 10 A
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value • at 48 V rated value • at 48 V rated value	1 10 A 6 A 3 A 2 A 1 A 10 A 6 A
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 24 V rated value • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 600 V rated value	1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 24 V rated value • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 410 V rated value	1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 48 V rated value • at 48 V rated value • at 48 V rated value • at 40 V rated value	1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value • at 48 V rated value • at 48 V rated value • at 400 V rated value • at 220 V rated value	1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A 1 A
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 48 V rated value • at 24 V rated value • at 48 V rated value • at 400 V rated value • at 250 V rated value • at 24 V rated value • at 24 V rated value • at 25 V rated value • at 110 V rated value • at 220 V rated value • at 220 V rated value • at 200 V rated value	1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 24 V rated value • at 24 V rated value • at 48 V rated value • at 400 V rated value • at 25 V rated value • at 110 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 25 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value	1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 24 V rated value • at 48 V rated value • at 40 V rated value • at 24 V rated value • at 250 V rated value • at 24 V rated value • at 250 V rated value • at 260 V rated value • at 270 V rated value • at 20 V rated value • at 110 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 24 V rated value	1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 10 A 1
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 48 V rated value • at 48 V rated value • at 48 V rated value • at 10 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 220 V rated value • at 600 V rated value • at 48 V rated value • at 24 V rated value • at 24 V rated value • at 24 V rated value • at 48 V rated value • at 48 V rated value	1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 10 A 1
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 48 V rated value • at 48 V rated value • at 40 V rated value • at 690 V rated value • at 690 V rated value • at 490 V rated value • at 490 V rated value • at 690 V rated value • at 690 V rated value • at 24 V rated value • at 24 V rated value • at 25 V rated value • at 125 V rated value • at 600 V rated value • at 600 V rated value • at 24 V rated value • at 24 V rated value • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 48 V rated value • at 60 V rated value	1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 10 A 1
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 400 V rated value • at 20 V rated value • at 21 V rated value • at 110 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 24 V rated value • at 48 V rated value • at 24 V rated value • at 24 V rated value • at 24 V rated value • at 48 V rated value <	1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 3 A 2 A 1 A 10 A 10 A 6 A 10
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 400 V rated value • at 24 V rated value • at 110 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value	1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 6 A 3 A 2 A 1 A 10 A 10 A 6 A 10 1
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 600 V rated value • at 48 V rated value • at 60 V rated value • at 220 V rated value • at 110 V rated value • at 600 V rated value • at 220 V rated value • at 24 V rated value • at 24 V rated value • at 60 V rated value • at 220 V rated value • at 600 V rated value • at 24 V rated value • at 600 V rated value • at 24 V rated value • at 600 V rated value • at 24 V rated value • at 100 V rated value	1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 6 A 3 A 2 A 1 A 10 A 10 A 6 A 6 A 6 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 220 V rated value • at 24 V rated value • at 24 V rated value • at 220 V rated value • at 600 V rated value • at 24 V rated value • at 60 V rated value • at 10 V rated value • at 10 V rated value <tr< td=""><td>1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 6 A 3 A 2 A 1 A 10 A 6 A 1 A 10 A 6 A 3 A 2 A 1 A 1 A 10 A 6 A 3 A 2 A 1 A 1 A 0 15 A 10 A 0.15 A</td></tr<>	1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 6 A 3 A 2 A 1 A 10 A 6 A 1 A 10 A 6 A 3 A 2 A 1 A 1 A 10 A 6 A 3 A 2 A 1 A 1 A 0 15 A 10 A 0.15 A
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 48 V rated value • at 24 V rated value • at 25 V rated value • at 220 V rated value • at 24 V rated value • at 600 V rated value • at 24 V rated value • at 600 V rated value • at 220 V rated value • at 24 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value <t< td=""><td>1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 6 A 3 A 2 A 1 A 10 A 10 A 6 A 6 A 6 A 6 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1</td></t<>	1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 6 A 3 A 2 A 1 A 10 A 10 A 6 A 6 A 6 A 6 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 220 V rated value • at 24 V rated value • at 24 V rated value • at 220 V rated value • at 600 V rated value • at 24 V rated value • at 60 V rated value • at 10 V rated value • at 10 V rated value <tr< td=""><td>1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 6 A 3 A 2 A 1 A 10 A 6 A 1 A 10 A 6 A 3 A 2 A 1 A 1 A 10 A 6 A 3 A 2 A 1 A 1 A 10 A 6 A 3 A 2 A 1 A 1 A 0 15 A 10 A 0.15 A</td></tr<>	1 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 6 A 3 A 2 A 1 A 10 A 6 A 1 A 10 A 6 A 3 A 2 A 1 A 1 A 10 A 6 A 3 A 2 A 1 A 1 A 10 A 6 A 3 A 2 A 1 A 1 A 0 15 A 10 A 0.15 A

	77. 4			
at 480 V rated value	77 A			
at 600 V rated value	62 A			
yielded mechanical performance [hp]				
• for single-phase AC motor	7.5 hr			
- at 110/120 V rated value	7.5 hp			
— at 230 V rated value	15 hp			
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	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface			
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715			
 side-by-side mounting 	Yes			
height	140 mm			
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			
 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 	spring-loaded terminals			
at contactor for auxiliary contacts	Spring-type terminals			
of magnet coil	Spring-type terminals			
type of connectable conductor cross-sections for main contacts	$2x/25 = 25 \text{ mm}^2$ $1x/25 = 50 \text{ mm}^2$			
finely stranded with core end processing	2x (2.5 35 mm²), 1x (2.5 50 mm²)			
connectable conductor cross-section for main contacts	2.5. 16 mm ²			
• solid	2.5 16 mm ²			
 stranded finally stranded with core and processing 	6 70 mm ²			
finely stranded with core end processing	2.5 50 mm ²			
connectable conductor cross-section for auxiliary contacts	0.5 0.5 mm²			
solid or stranded	0.5 2.5 mm ²			
finely stranded with core end processing	0.5 2.5 mm ²			
finely stranded without core end processing	0.5 2.5 mm²			
 type of connectable conductor cross-sections for auxiliary contacts 				

— solid or str	anded		2x (0.5 2.5 mm²)			
	nded with core end process	ling	2x (0.5 2.5 mm ²)			
-		÷				
-	y stranded without core end processing		2x (0.5 2.5 mm ²)			
for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section		2x (20 16)				
for main contact	ts		10 2			
 for auxiliary con 	tacts		20 14			
Safety related data						
product function						
•	ccording to IEC 60947-4-1		Yes			
	operation according to IE	C 60947-5-1	No			
	ty-related switching OFF		Yes			
-	emand rate according to SN	N 31920	1 000 000			
proportion of danger						
	d rate according to SN 319	20	40 %			
	nd rate according to SN 31		73 %			
	ow demand rate according		100 FIT			
	interval or service life acco		20 a			
61508			20 a			
protection class IP o	n the front according to I	EC 60529	IP20			
touch protection on	the front according to IEC	60529	finger-safe, for vertical con	tact from the front		
Certificates/ approvals	3					
CSA	ccc		UL			
EMC	Functional Safety/Safety of Ma- chinery	Declaration of Conformity		Test Certificates		
RCM	<u>Type Examination Cer-</u> <u>tificate</u>	CE EG-Konf.	UK CA	<u>Type Test Certific-</u> ates/Test Report	Special Test Certific- ate	
Marine / Shipping						
ABS		Lloyds Register urs	PRS	RINA	RMRS	
other	Railway	Dangerous Go	od Environment			
<u>Confirmation</u>	Vibration and Shock	Transport Inforn	nation Environmental Con firmations	<u>D-</u>		
Further information	d to ovit the Proving more	kat (ana hara)				
https://press.siemens.	d to exit the Russian mar com/global/en/pressrelease on the renewal of the cur	e/siemens-wind-do				

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=3RT2045-3AK60 Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2045-3AK60

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2045-3AK60

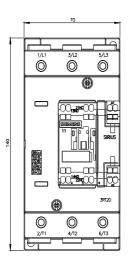
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

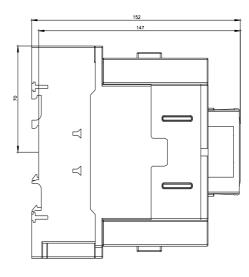
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2045-3AK60&lang=en

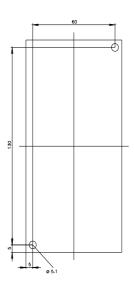
Characteristic: Tripping characteristics, I2t, Let-through current

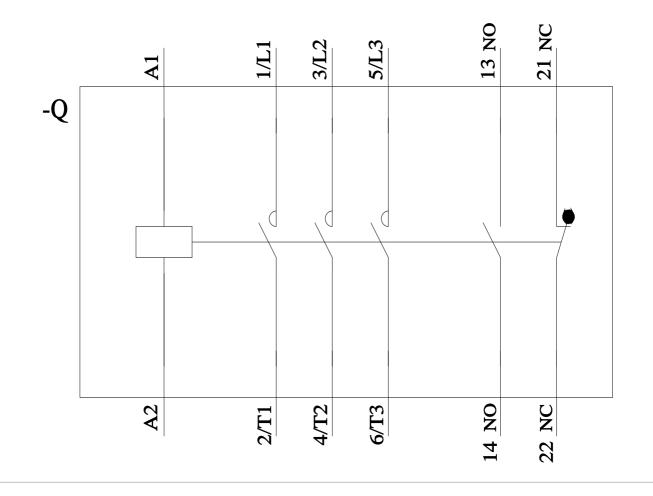
https://support.industry.siemens.com/cs/ww/en/ps/3RT2045-3AK60/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2045-3AK60&objecttype=14&gridview=view1









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