SIEMENS

Data sheet

3RT2037-3AK60



power contactor, AC-3e/AC-3, 65 A, 30 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: S2

product brand name	SIRIUS		
product designation	Power contactor		
product type designation	3RT2		
General technical data			
size of contactor	\$2		
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 	11.4 W		
 at AC in hot operating state per pole 	3.8 W		
 without load current share typical 	18.5 W		
insulation voltage			
 of main circuit with degree of pollution 3 rated value 	690 V		
 of auxiliary circuit with degree of pollution 3 rated value 	690 V		
surge voltage resistance			
 of main circuit rated value 	6 kV		
 of auxiliary circuit rated value 	6 kV		
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	400 V		
shock resistance at rectangular impulse			
• at AC	11.8g / 5 ms, 7.4g / 10 ms		
shock resistance with sine pulse			
• at AC	18.5g / 5 ms, 11.6g / 10 ms		
mechanical service life (operating cycles)			
 of contactor typical 	10 000 000		
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000		
 of the contactor with added auxiliary switch block typical 	10 000 000		
reference code according to IEC 81346-2	Q		
Substance Prohibitance (Date)	10/01/2014		
Ambient conditions			
installation altitude at height above sea level maximum	2 000 m		
ambient temperature			
 during operation 	-25 +60 °C		
during storage	-55 +80 °C		
relative humidity minimum	10 %		
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %		
Main circuit			
number of poles for main current circuit	3		

number of NO contacts for main contacts	3
operating voltage	5
• at AC-3 rated value maximum	690 V
at AC-3 rated value maximum at AC-3e rated value maximum	690 V
operational current	
at AC-1 at 400 V at ambient temperature 40 °C rated	80 A
value	
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated	80 A
value	
— up to 690 V at ambient temperature 60 °C rated value	70 A
• at AC-3	
— at 400 V rated value	65 A
— at 500 V rated value	65 A
— at 690 V rated value	47 A
• at AC-3e	
— at 400 V rated value	65 A
— at 500 V rated value	65 A
— at 690 V rated value	47 A
at AC-4 at 400 V rated value	55 A
• at AC-5a up to 690 V rated value	70.4 A
• at AC-5b up to 400 V rated value	53.9 A
● at AC-6a	
— up to 230 V for current peak value n=20 rated value	56.9 A
— up to 400 V for current peak value n=20 rated value	56.9 A
— up to 500 V for current peak value n=20 rated value	56.9 A
— up to 690 V for current peak value n=20 rated value	47 A
● at AC-6a	
 — up to 230 V for current peak value n=30 rated value 	38 A
 — up to 400 V for current peak value n=30 rated value 	38 A
 — up to 500 V for current peak value n=30 rated value 	38 A
 — up to 690 V for current peak value n=30 rated value 	38 A
minimum cross-section in main circuit at maximum AC-1 rated value	25 mm ²
operational current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	28 A
• at 690 V rated value	22 A
operational current	
 at 1 current path at DC-1 	
— at 24 V rated value	55 A
— at 60 V rated value	23 A
— at 110 V rated value	4.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.4 A
— at 600 V rated value	0.25 A
 with 2 current paths in series at DC-1 	
— at 24 V rated value	55 A
— at 60 V rated value	45 A
— at 110 V rated value	45 A
— at 220 V rated value	5 A
— at 440 V rated value	1 A
— at 600 V rated value	0.8 A
with 3 current paths in series at DC-1	
— at 24 V rated value	55 A
— at 60 V rated value	55 A
- at 110 V rated value	55 A
- at 220 V rated value	45 A
— at 440 V rated value	2.9 A
— at 600 V rated value	1.4 A
 at 1 current path at DC-3 at DC-5 	

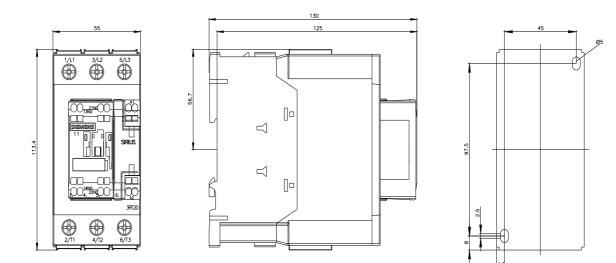
	— at 24 V rated value	35 A			
	— at 60 V rated value	6 A			
	— at 220 V rated value	1 A			
• win 2 current path in series at DC-3 at DC-5 5 - at 24 V rade value 55 Å - at 110 V rade value 25 Å - at 110 V rade value 5 Å - at 440 V rade value 0.27 Å - at 440 V rade value 0.18 Å - at 440 V rade value 0.18 Å - at 440 V rade value 0.18 Å - at 440 V rade value 0.5 Å - at 440 V rade value 55 Å - at 440 V rade value 55 Å - at 440 V rade value 0.38 Å - at 440 V rade value 30 kW - at 440 V rade value 30 kW - at 420 V rade value 37 kW - at 400 V rade value 37 kW <td>— at 440 V rated value</td> <td colspan="4">0.1 A</td>	— at 440 V rated value	0.1 A			
	— at 600 V rated value	0.06 A			
	 with 2 current paths in series at DC-3 at DC-5 				
- all 10 Vinited value at 440 Vinited value b 27 A - at 600 Vinited value 0 27 A - at 600 Vinited value 0 27 A - at 600 Vinited value 0 27 A - at 60 Vinited value 55 A - at 24 Vinited value 55 A - at 24 Vinited value 55 A - at 70 Vinited value 56 A - at 700 Vinited value 57 A - at 400 Vinited value 58 A - at 700 Vinited value 59 A - at 700 Vinited value 50 Vinited value	— at 24 V rated value	55 A			
	— at 60 V rated value	45 A			
	— at 110 V rated value	25 A			
	— at 220 V rated value	5 A			
• with 3 current path in series at DC-3 at DC-5 55 A - at 20 V rated value 55 A - at 110 V rated value 55 A - at 120 V rated value 55 A - at 440 V rated value 66 A - at 420 V rated value 0.35 A operating power 0.35 A - at 600 V rated value 0.35 A operating power 0.15 KW - at 230 V rated value 30 KW - at 230 V rated value 30 KW - at 500 V rated value 30 KW - at 500 V rated value 30 KW - at 500 V rated value 37 KW - at 600 V rated value 30 KW - at 500 V rated value 30 kW - at 500 V rated value 30 kW - at 600 V rated value 30 kW opoperating poperator 30 kW <tr< td=""><td>— at 440 V rated value</td><td>0.27 A</td></tr<>	— at 440 V rated value	0.27 A			
	— at 600 V rated value	0.16 A			
	 with 3 current paths in series at DC-3 at DC-5 				
	— at 24 V rated value	55 A			
	— at 60 V rated value	55 A			
	— at 110 V rated value	55 A			
	— at 220 V rated value	25 A			
operating power at AC-2 at 400 V rated value 30 kW • at AC-3	— at 440 V rated value	0.6 A			
	— at 600 V rated value	0.35 A			
	operating power				
		30 kW			
	• at AC-3				
at 400 V rated value30 kW at 500 V rated value37 kW at 230 V rated value37 kW at 230 V rated value15. kW at 400 V rated value30 kW at 630 V rated value30 kW at 630 V rated value37 kW at 630 V rated value20 kWoperating power for approx. 20000 operating cycles at AC at 640 V rated value20 kWoperating apparent power at AC-6820 kW operating apparent power at AC-6850 kW op to 200 V for current peak value n=20 rated value34 kVA up to 200 V for current peak value n=20 rated value35 kVA op to 400 V for current peak value n=30 rated value36 k kVA up to 200 V for current peak value n=30 rated value26 kVA op to 400 V for current peak value n=30 rated value28 kVA up to 560 V for current peak value n=30 rated value28 kVA op to 660 V for current peak value n=30 rated value28 kVA op to 650 V for current peak value n=30 rated value28 kVA op to 650 V for current peak value n=30 rated value28 kVA op time bas value n=30 rated value28 kVA <td>— at 230 V rated value</td> <td>18.5 kW</td>	— at 230 V rated value	18.5 kW			
at 890 V rated value37 kW• at AC-3e at 230 V rated value30 kW at 400 V rated value30 kW at 690 V rated value37 kW at 690 V rated value20 kWoperating paperent power at AC-6a22.6 kVA up to 500 V for current peak value n=20 rated value39.4 kVA up to 500 V for current peak value n=20 rated value56.1 kVA up to 500 V for current peak value n=20 rated value56.1 kVA up to 500 V for current peak value n=30 rated value56.1 kVA up to 500 V for current peak value n=30 rated value28.2 kVA up to 500 V for current peak value n=30 rated value28.2 kVA up to 500 V for current peak value n=30 rated value28.2 kVA up to 500 V for current peak value n=30 rated value28.2 kVA up to 500 V for current peak value n=30 rated value28.2 kVA up to 500 V for current neak value n=30 rated value28.2 kVA up to 500 V for current neak value n=30 rated value28.2 kVA up to 500 V for current neak value n=30 rated value28.2 kVA up to 500 V for current neak value n=30 rated value28.2 kVA up to 500 V for current neak value n=30 rated value28.2 kVA up to 500 V for current neak value n=30 rated value28.2 kVA </td <td>— at 400 V rated value</td> <td>30 kW</td>	— at 400 V rated value	30 kW			
• at AC-3eI at 230 V rated value15.5 kW- at 400 V rated value30 kW- at 600 V rated value37 kW- at 600 V rated value37 kW- at 600 V rated value37 kWoperating power for approx. 20000 operating cycles at AC-414.7 kW• at 400 V rated value14.7 kW• at 600 V rated value20 kWoperating apparent power at AC-6a20 kW• up to 230 V for current peak value n=20 rated value39.4 kVA• up to 500 V for current peak value n=20 rated value39.4 kVA• up to 690 V for current peak value n=20 rated value56.1 kVAoperating apparent power at AC-6a15.1 kVA• up to 690 V for current peak value n=30 rated value22.8 kVA• up to 600 V for current peak value n=30 rated value25.8 kVA• up to 500 V for current peak value n=30 rated value25.8 kVA• up to 500 V for current peak value n=30 rated value25.8 kVA• up to 500 V for current peak value n=30 rated value35.4 kVA• up to 500 V for current peak value n=30 rated value32.8 kVA• up to 500 V for current peak value n=30 rated value35.4 kVA• up to 500 V for current no current maximum1055 A; Use minimum cross-section acc. to AC-1 rated value• limited to 1s switching at zero current maximum520 A; Use minimum cross-section acc. to AC-1 rated value• limited to 1s switching at zero current maximum520 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum520 A; Use minimum cross-section acc. to AC-1 ra	— at 500 V rated value	37 kW			
at 230 V rated value18.5 kW at 400 V rated value30 kW at 500 V rated value37 kWoperating power for approx. 20000 operating cycles at AC- 47 kW• at 400 V rated value14.7 kWoperating apparent power at AC-6a22 22 kWA• up to 230 V for current peak value n=20 rated value39.4 kVA• up to 500 V for current peak value n=20 rated value39.4 kVA• up to 500 V for current peak value n=20 rated value50.1 kVA• up to 500 V for current peak value n=20 rated value51.4 kVA• up to 500 V for current peak value n=30 rated value52.4 kVA• up to 500 V for current peak value n=30 rated value22.8 kVA• up to 500 V for current peak value n=30 rated value22.8 kVA• up to 500 V for current peak value n=30 rated value22.8 kVA• up to 500 V for current peak value n=30 rated value22.8 kVA• up to 500 V for current peak value n=30 rated value22.8 kVA• up to 500 V for current peak value n=30 rated value22.8 kVA• up to 500 V for current peak value n=30 rated value32.8 kVA• up to 500 V for current peak value n=30 rated value32.8 kVA• up to 500 V for current peak value n=30 rated value33.6 k.U se minimum cross-section acc. to AC-1 rated value• up to 500 V for current peak value n=30 rated value33.6 k.U se minimum cross-section acc. to AC-1 rated value• uimited to 1 s switching at zero current maximum33.6 k.U se minimum cross-section acc. to AC-1 rated value• limited to 1 s switching at zero current maximum30.6 k.U se minimum cross-	— at 690 V rated value	37 kW			
	• at AC-3e				
	— at 230 V rated value	18.5 kW			
	— at 400 V rated value	30 kW			
operating power for approx. 20000 operating cycles at AC-4 14.7 kW • at 400 V rated value 20 kW operating apparent power at AC-6a 20 kW • up to 230 V for current peak value n=20 rated value 39.4 kVA • up to 500 V for current peak value n=20 rated value 39.4 kVA • up to 500 V for current peak value n=20 rated value 39.4 kVA • up to 500 V for current peak value n=20 rated value 46.1 kVA • up to 500 V for current peak value n=20 rated value 56.1 kVA operating apparent power at AC-6a 15.1 kVA • up to 500 V for current peak value n=30 rated value 56.2 kVA • up to 500 V for current peak value n=30 rated value 28.8 kVA • up to 500 V for current peak value n=30 rated value 28.8 kVA • up to 690 V for current peak value n=30 rated value 32.8 kVA • up to 690 V for current peak value n=30 rated value 45.3 kVA short-time withstand current in cold operating state up to 40° C 1055 A; Use minimum cross-section acc. to AC-1 rated value • limited to 1s switching at zero current maximum 1055 A; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching at zero current maximum 236 A; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching at	— at 500 V rated value	37 kW			
4 i at 400 V rated value 14.7 kW • at 690 V rated value 20 kW operating apparent power at AC-6a 22.6 kVA • up to 230 V for current peak value n=20 rated value 39.4 kVA • up to 500 V for current peak value n=20 rated value 39.4 kVA • up to 500 V for current peak value n=20 rated value 49.2 kVA • up to 500 V for current peak value n=20 rated value 56.1 kVA operating apparent power at AC-6a 15.1 kVA • up to 230 V for current peak value n=30 rated value 28.2 kVA • up to 600 V for current peak value n=30 rated value 28.2 kVA • up to 500 V for current peak value n=30 rated value 28.2 kVA • up to 600 V for current peak value n=30 rated value 28.2 kVA • up to 600 V for current peak value n=30 rated value 26.2 kVA • up to 600 V for current peak value n=30 rated value 26.3 kVA • up to 600 V for current peak value n=30 rated value 26.3 kVA • up to 600 V for current peak value n=30 rated value 32.8 kVA • up to 600 V for current peak value n=30 rated value 45.3 kVA • up to 600 V for current maximum 1055 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 500 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 27	— at 690 V rated value	37 kW			
4 i at 400 V rated value 14.7 kW • at 690 V rated value 20 kW operating apparent power at AC-6a 22.6 kVA • up to 230 V for current peak value n=20 rated value 39.4 kVA • up to 500 V for current peak value n=20 rated value 39.4 kVA • up to 500 V for current peak value n=20 rated value 49.2 kVA • up to 500 V for current peak value n=20 rated value 56.1 kVA operating apparent power at AC-6a 15.1 kVA • up to 230 V for current peak value n=30 rated value 28.2 kVA • up to 600 V for current peak value n=30 rated value 28.2 kVA • up to 500 V for current peak value n=30 rated value 28.2 kVA • up to 600 V for current peak value n=30 rated value 28.2 kVA • up to 600 V for current peak value n=30 rated value 26.2 kVA • up to 600 V for current peak value n=30 rated value 26.3 kVA • up to 600 V for current peak value n=30 rated value 26.3 kVA • up to 600 V for current peak value n=30 rated value 32.8 kVA • up to 600 V for current peak value n=30 rated value 45.3 kVA • up to 600 V for current maximum 1055 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 500 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 27					
• at 690 V rated value 20 kW operating apparent power at AC-6a 22.6 kVA • up to 230 V for current peak value n=20 rated value 39.4 kVA • up to 600 V for current peak value n=20 rated value 39.4 kVA • up to 690 V for current peak value n=20 rated value 49.2 kVA • up to 690 V for current peak value n=20 rated value 56.1 kVA operating apparent power at AC-6a 51.1 kVA • up to 230 V for current peak value n=30 rated value 26.2 kVA • up to 500 V for current peak value n=30 rated value 28.8 kVA • up to 690 V for current peak value n=30 rated value 28.8 kVA • up to 690 V for current peak value n=30 rated value 28.8 kVA • up to 690 V for current peak value n=30 rated value 45.3 kVA short-time withstand current in cold operating state up to 40°C 45.3 kVA • limited to 1 s switching at zero current maximum 1 055 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 20 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 20 A; Use minimum cross-section acc. to AC-1 rated value • limited to 30 s switching at zero current maximum 20 A; Use minimum cross-section acc. to AC-1 rated value					
operating apparent power at AC-6a22.6 kVA• up to 230 V for current peak value n=20 rated value39.4 kVA• up to 500 V for current peak value n=20 rated value39.4 kVA• up to 500 V for current peak value n=20 rated value49.2 kVA• up to 690 V for current peak value n=20 rated value50.1 kVAoperating apparent power at AC-6a15.1 kVA• up to 230 V for current peak value n=30 rated value26.2 kVA• up to 500 V for current peak value n=30 rated value22.6 kVA• up to 500 V for current peak value n=30 rated value26.2 kVA• up to 500 V for current peak value n=30 rated value28.8 kVA• up to 500 V for current peak value n=30 rated value32.8 kVA• up to 500 V for current peak value n=30 rated value45.3 kVA• up to 690 V for current peak value n=30 rated value45.3 kVA• up to 500 V for current maximum1 055 A; Use minimum cross-section acc. to AC-1 rated value• limited to 1 s switching at zero current maximum20 A; Use minimum cross-section acc. to AC-1 rated value• limited to 30 s switching at zero current maximum36 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value	 at 400 V rated value 	14.7 kW			
• up to 230 V for current peak value n=20 rated value 22.6 kVA • up to 400 V for current peak value n=20 rated value 39.4 kVA • up to 500 V for current peak value n=20 rated value 49.2 kVA • up to 690 V for current peak value n=20 rated value 50.1 kVA operating apparent power at AC-6a 6 • up to 230 V for current peak value n=30 rated value 26.2 kVA • up to 500 V for current peak value n=30 rated value 26.2 kVA • up to 500 V for current peak value n=30 rated value 26.2 kVA • up to 500 V for current peak value n=30 rated value 28.4 kVA • up to 500 V for current peak value n=30 rated value 28.4 kVA • up to 690 V for current peak value n=30 rated value 32.8 kVA • up to 690 V for current peak value n=30 rated value 45.3 kVA • up to 690 V for current peak value n=30 rated value 45.3 kVA • up to 690 V for current peak value n=30 rated value 45.3 kVA • up to 690 V for current peak value n=30 rated value 45.3 kVA • up to 690 V for current peak value n=30 rated value 45.3 kVA • up to 690 V for current peak value n=30 rated value 45.3 kVA • up to 690 V for current peak value n=30 rated value 730 A; Use minimum cross-section acc. to AC-1 rated value </td <td> at 690 V rated value </td> <td>20 kW</td>	 at 690 V rated value 	20 kW			
up to 400 V for current peak value n=20 rated value39.4 kVAup to 500 V for current peak value n=20 rated value49.2 kVAup to 690 V for current peak value n=20 rated value56.1 kVAoperating apparent power at AC-6aup to 230 V for current peak value n=30 rated value15.1 kVAup to 400 V for current peak value n=30 rated value26.2 kVAup to 500 V for current peak value n=30 rated value32.8 kVAup to 690 V for current peak value n=30 rated value32.8 kVAup to 690 V for current peak value n=30 rated value32.8 kVAup to 690 V for current peak value n=30 rated value32.8 kVAup to 690 V for current peak value n=30 rated value45.3 kVAshort-time withstand current in cold operating state up to 40 °C40.2 Cilmited to 1 s switching at zero current maximum1055 A; Use minimum cross-section acc. to AC-1 rated valueilmited to 50 s switching at zero current maximum520 A; Use minimum cross-section acc. to AC-1 rated valueilmited to 60 s switching at zero current maximum36 A; Use minimum cross-section acc. to AC-1 rated valueilmited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated valueilmited to 60 s switching at zero current maximum270 A; Use minimum cross-section acc. to AC-1 rated valueilmited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated valueilmited to 60 s switching at zero current maximum270 A; Use minimum cross-section acc. to AC-1 rated valueilmited to 60 s switching at zero current maximum200 1/h	operating apparent power at AC-6a				
• up to 500 V for current peak value n=20 rated value 49.2 kVA • up to 690 V for current peak value n=20 rated value 56.1 kVA operating apparent power at AC-6a 15.1 kVA • up to 230 V for current peak value n=30 rated value 26.2 kVA • up to 500 V for current peak value n=30 rated value 26.2 kVA • up to 500 V for current peak value n=30 rated value 26.2 kVA • up to 500 V for current peak value n=30 rated value 25.3 kVA • up to 500 V for current peak value n=30 rated value 45.3 kVA • up to 500 V for current peak value n=30 rated value 45.3 kVA • up to 500 V for current peak value n=30 rated value 45.3 kVA • up to 500 V for current maximum 1 055 A; Use minimum cross-section acc. to AC-1 rated value • limited to 1 s switching at zero current maximum 520 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 236 A; Use minimum cross-section acc. to AC-1 rated value • limited to 60 S switching at zero current maximum 272 A; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching at zero current maximum 272 A; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching at zero current maximum 272 A; Use minimum cross-section acc. to AC-1 rated value <td> up to 230 V for current peak value n=20 rated value </td> <td>22.6 kVA</td>	 up to 230 V for current peak value n=20 rated value 	22.6 kVA			
• up to 690 V for current peak value n=20 rated value for current peak value n=30 rated value iup to 230 V for current peak value n=30 rated value iup to 230 V for current peak value n=30 rated value iup to 500 V for current peak value n=30 rated value 26.2 kVA iup to 500 V for current peak value n=30 rated value 32.8 kVA iup to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C ilimited to 1 s switching at zero current maximum limited to 5 s switching at zero current maximum ilimited to 10 s switching at zero current maximum ilimited to 30 s switching at zero current maximum ilimited to 30 s switching at zero current maximum ilimited to 60 s switching at zero current maximum ilimited to 60 s switching at zero current maximum ilimited to 60 s switching at zero current maximum at AC- sound thing frequency i at AC- for at AC- for at AC- for at AC- sound thing i at AC-2 maximum at AC-3 maximum i at AC-3 maximum current at AC-4 maximum zurent at AC-4 maximum zurent	 up to 400 V for current peak value n=20 rated value 	39.4 kVA			
operating apparent power at AC-6a15.1 kVA• up to 230 V for current peak value n=30 rated value15.1 kVA• up to 400 V for current peak value n=30 rated value26.2 kVA• up to 500 V for current peak value n=30 rated value32.8 kVA• up to 690 V for current peak value n=30 rated value45.3 kVAshort-time withstand current in cold operating state up to 40 °C45.3 kVA• limited to 1 s switching at zero current maximum1 055 A; Use minimum cross-section acc. to AC-1 rated value• limited to 1 s switching at zero current maximum520 A; Use minimum cross-section acc. to AC-1 rated value• limited to 10 s switching at zero current maximum520 A; Use minimum cross-section acc. to AC-1 rated value• limited to 30 s switching at zero current maximum336 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• at AC5 000 1/h• at AC-1 maximum800 1/h• at AC-2 maximum400 1/h• at AC-3 maximum700 1/h• at AC-3 maximum700 1/h• at AC-4 maximum200 1/h	 up to 500 V for current peak value n=20 rated value 	49.2 kVA			
 up to 230 V for current peak value n=30 rated value 15.1 kVA up to 400 V for current peak value n=30 rated value 26.2 kVA up to 500 V for current peak value n=30 rated value 32.8 kVA up to 690 V for current peak value n=30 rated value 45.3 kVA short-time withstand current in cold operating state up to 40 °C limited to 1 s switching at zero current maximum 1055 A; Use minimum cross-section acc. to AC-1 rated value limited to 1 s switching at zero current maximum 1055 A; Use minimum cross-section acc. to AC-1 rated value limited to 30 s switching at zero current maximum S20 A; Use minimum cross-section acc. to AC-1 rated value limited to 30 s switching at zero current maximum S22 A; Use minimum cross-section acc. to AC-1 rated value limited to 60 s switching at zero current maximum S22 A; Use minimum cross-section acc. to AC-1 rated value limited to 60 s switching at zero current maximum S22 A; Use minimum cross-section acc. to AC-1 rated value limited to 60 s switching at zero current maximum S22 A; Use minimum cross-section acc. to AC-1 rated value limited to 60 s switching at zero current maximum S22 A; Use minimum cross-section acc. to AC-1 rated value at AC s to 00 1/h at AC-1 maximum at AC-1 maximum at AC-1 maximum at AC-2 maximum at AC-3 maximum at AC-4 maximum at AC-4 maximum at AC-4 maximum at AC-4 maximum 	 up to 690 V for current peak value n=20 rated value 	56.1 kVA			
• up to 400 V for current peak value n=30 rated value26.2 kVA• up to 500 V for current peak value n=30 rated value32.8 kVA• up to 690 V for current peak value n=30 rated value45.3 kVA short-time withstand current in cold operating state up to 40 °C 1 055 A; Use minimum cross-section acc. to AC-1 rated value• limited to 1 s switching at zero current maximum1 055 A; Use minimum cross-section acc. to AC-1 rated value• limited to 10 s switching at zero current maximum520 A; Use minimum cross-section acc. to AC-1 rated value• limited to 10 s switching at zero current maximum520 A; Use minimum cross-section acc. to AC-1 rated value• limited to 30 s switching at zero current maximum336 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching frequency5 000 1/h• at AC5 000 1/h• at AC-1 maximum800 1/h• at AC-2 maximum400 1/h• at AC-3 maximum700 1/h• at AC-3 maximum700 1/h• at AC-3 maximum700 1/h• at AC-4 maximum200 1/h	operating apparent power at AC-6a				
• up to 500 V for current peak value n=30 rated value32.8 kVA• up to 690 V for current peak value n=30 rated value45.3 kVAshort-time withstand current in cold operating state up to 40 °C1055 A; Use minimum cross-section acc. to AC-1 rated value• limited to 1 s switching at zero current maximum1 055 A; Use minimum cross-section acc. to AC-1 rated value• limited to 10 s switching at zero current maximum520 A; Use minimum cross-section acc. to AC-1 rated value• limited to 10 s switching at zero current maximum520 A; Use minimum cross-section acc. to AC-1 rated value• limited to 30 s switching at zero current maximum336 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• at AC5 000 1/h• at AC-1 maximum800 1/h• at AC-2 maximum400 1/h• at AC-3 maximum700 1/h• at AC-3 maximum700 1/h• at AC-3 maximum200 1/h	 up to 230 V for current peak value n=30 rated value 	15.1 kVA			
• up to 690 V for current peak value n=30 rated value45.3 kVAshort-time withstand current in cold operating state up to 40 °C45.3 kVA• limited to 1 s switching at zero current maximum1 055 A; Use minimum cross-section acc. to AC-1 rated value• limited to 5 s switching at zero current maximum730 A; Use minimum cross-section acc. to AC-1 rated value• limited to 10 s switching at zero current maximum520 A; Use minimum cross-section acc. to AC-1 rated value• limited to 30 s switching at zero current maximum336 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• at AC5 000 1/h• at AC-1 maximum800 1/h• at AC-2 maximum400 1/h• at AC-3 maximum700 1/h• at AC-3 maximum700 1/h• at AC-4 maximum200 1/h	 up to 400 V for current peak value n=30 rated value 	26.2 kVA			
short-time withstand current in cold operating state up to 40 °C1 055 A; Use minimum cross-section acc. to AC-1 rated value• limited to 1 s switching at zero current maximum1 055 A; Use minimum cross-section acc. to AC-1 rated value• limited to 5 s switching at zero current maximum520 A; Use minimum cross-section acc. to AC-1 rated value• limited to 30 s switching at zero current maximum336 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum336 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• at AC5 000 1/h• at AC-1 maximum800 1/h• at AC-2 maximum400 1/h• at AC-3 maximum700 1/h• at AC-3 maximum700 1/h• at AC-3 maximum200 1/h	 up to 500 V for current peak value n=30 rated value 	32.8 kVA			
40 °C• limited to 1 s switching at zero current maximum1 055 A; Use minimum cross-section acc. to AC-1 rated value• limited to 5 s switching at zero current maximum730 A; Use minimum cross-section acc. to AC-1 rated value• limited to 10 s switching at zero current maximum520 A; Use minimum cross-section acc. to AC-1 rated value• limited to 30 s switching at zero current maximum336 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• at AC5 000 1/h• at AC5 000 1/h• at AC-1 maximum800 1/h• at AC-2 maximum400 1/h• at AC-3 maximum700 1/h• at AC-3 e maximum700 1/h• at AC-4 maximum200 1/h	 up to 690 V for current peak value n=30 rated value 	45.3 kVA			
• limited to 1 s switching at zero current maximum1 055 A; Use minimum cross-section acc. to AC-1 rated value• limited to 5 s switching at zero current maximum730 A; Use minimum cross-section acc. to AC-1 rated value• limited to 10 s switching at zero current maximum520 A; Use minimum cross-section acc. to AC-1 rated value• limited to 30 s switching at zero current maximum336 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching frequency272 A; Use minimum cross-section acc. to AC-1 rated value• at AC5 000 1/h• at AC-1 maximum800 1/h• at AC-2 maximum800 1/h• at AC-3 maximum400 1/h• at AC-3 maximum700 1/h• at AC-3 maximum700 1/h• at AC-4 maximum200 1/h					
• limited to 5 s switching at zero current maximum730 A; Use minimum cross-section acc. to AC-1 rated value• limited to 10 s switching at zero current maximum520 A; Use minimum cross-section acc. to AC-1 rated value• limited to 30 s switching at zero current maximum336 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• at AC5 000 1/h• at AC5 000 1/h• at AC-1 maximum800 1/h• at AC-2 maximum400 1/h• at AC-3 maximum700 1/h• at AC-3 maximum700 1/h• at AC-4 maximum200 1/h					
• limited to 10 s switching at zero current maximum520 A; Use minimum cross-section acc. to AC-1 rated value• limited to 30 s switching at zero current maximum336 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated value• no-load switching frequency272 A; Use minimum cross-section acc. to AC-1 rated value• at AC5 000 1/h• at AC-1 maximum800 1/h• at AC-2 maximum400 1/h• at AC-3 maximum700 1/h• at AC-3e maximum700 1/h• at AC-4 maximum200 1/h	-				
• limited to 30 s switching at zero current maximum336 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated valueno-load switching frequency • at AC5 000 1/hoperating frequency5 000 1/h• at AC-1 maximum800 1/h• at AC-2 maximum400 1/h• at AC-3 maximum700 1/h• at AC-3e maximum700 1/h• at AC-4 maximum200 1/h	-				
• limited to 60 s switching at zero current maximum272 A; Use minimum cross-section acc. to AC-1 rated valueno-load switching frequency5 000 1/h• at AC5 000 1/hoperating frequency800 1/h• at AC-1 maximum800 1/h• at AC-2 maximum400 1/h• at AC-3 maximum700 1/h• at AC-3 maximum200 1/h	-				
no-load switching frequency• at AC5 000 1/hoperating frequency• at AC-1 maximum800 1/h• at AC-2 maximum400 1/h• at AC-3 maximum700 1/h• at AC-3 maximum700 1/h• at AC-4 maximum200 1/h	-				
• at AC5 000 1/hoperating frequency800 1/h• at AC-1 maximum800 1/h• at AC-2 maximum400 1/h• at AC-3 maximum700 1/h• at AC-3e maximum700 1/h• at AC-4 maximum200 1/h		272 A; Use minimum cross-section acc. to AC-1 rated value			
operating frequency800 1/h• at AC-1 maximum800 1/h• at AC-2 maximum400 1/h• at AC-3 maximum700 1/h• at AC-3e maximum700 1/h• at AC-4 maximum200 1/h					
• at AC-1 maximum800 1/h• at AC-2 maximum400 1/h• at AC-3 maximum700 1/h• at AC-3e maximum700 1/h• at AC-4 maximum200 1/h		5 000 1/h			
• at AC-2 maximum 400 1/h • at AC-3 maximum 700 1/h • at AC-3e maximum 700 1/h • at AC-4 maximum 200 1/h					
• at AC-3 maximum 700 1/h • at AC-3e maximum 700 1/h • at AC-4 maximum 200 1/h					
• at AC-3e maximum 700 1/h • at AC-4 maximum 200 1/h					
• at AC-4 maximum 200 1/h					
Control circuit/ Control		200 1/h			
	Control circuit/ Control				

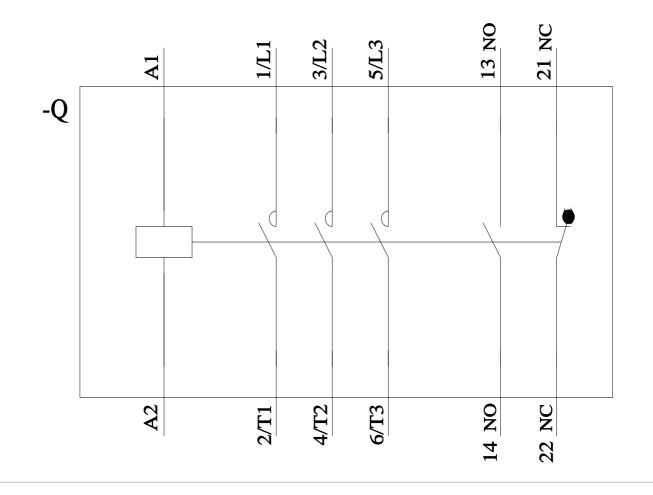
type of voltage of the control supply voltage	AC
control supply voltage at AC	
• at 50 Hz rated value	110 V
• at 60 Hz rated value	120 V
operating range factor control supply voltage rated value of magnet coil at AC	
• at 50 Hz	0.8 1.1
• at 60 Hz	0.8 1.1
apparent pick-up power of magnet coil at AC	
• at 50 Hz	212 VA
• at 60 Hz	188 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.69
• at 60 Hz	0.65
apparent holding power of magnet coil at AC	
• at 50 Hz	18.5 VA
• at 60 Hz	16.5 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.36
• at 60 Hz	0.39
closing delay	
• at AC	10 80 ms
opening delay	
• at AC	10 18 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	1
contact number of NO contacts for auxiliary contacts instantaneous	1
contact	
operational current at AC-12 maximum	10 A
operational current at AC-15	10 A
at 230 V rated value	
at 400 V rated value	3 A 2 A
at 500 V rated value	2 A
at 690 V rated value	1 A
operational current at DC-12	10.4
at 24 V rated value	10 A
at 48 V rated value	6 A
at 60 V rated value	6 A
at 110 V rated value	3 A 2 A
at 125 V rated value	2 A
at 220 V rated value	1 A 0.15 A
at 600 V rated value	0.15 A
operational current at DC-13	10.4
• at 24 V rated value	10 A
• at 48 V rated value	2 A
at 60 V rated value	2 A
at 110 V rated value	1A
at 125 V rated value	0.9 A
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	65 A
• at 600 V rated value	52 A
yielded mechanical performance [hp]	
 for single-phase AC motor 	
— at 110/120 V rated value	5 hp

— at 230 V rated value	10 hp				
for 3-phase AC motor	22.1				
— at 200/208 V rated value	20 hp				
— at 220/230 V rated value	20 hp				
— at 460/480 V rated value	50 hp				
— at 575/600 V rated value	50 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: 125A (690V,100kA), aM: 63A (690V,100kA), BS88: 100A (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	114 mm				
width	55 mm				
depth	130 mm				
required spacing					
with side-by-side mounting					
— forwards	10 mm				
— upwards	10 mm				
— downwards	10 mm				
— at the side	0 mm				
for grounded parts	•				
— forwards	10 mm				
— upwards	10 mm				
— at the side	6 mm				
— downwards	10 mm				
• for live parts	10 mm				
— forwards	10 mm				
— upwards	10 mm				
— downwards	10 mm				
— at the side					
	6 mm				
Connections/ Terminals					
type of electrical connection					
for main current circuit	screw-type terminals				
for auxiliary and control circuit	spring-loaded terminals				
at contactor for auxiliary contacts	Spring-type terminals				
of magnet coil	Spring-type terminals				
type of connectable conductor cross-sections for main contacts					
solid or stranded	2x (1 35 mm ²), 1x (1 50 mm ²)				
finely stranded with core end processing	2x (1 25 mm²), 1x (1 35 mm²)				
connectable conductor cross-section for main contacts					
finely stranded with core end processing	1 35 mm²				
connectable conductor cross-section for auxiliary contacts					
solid or stranded	0.5 2.5 mm ²				
 finely stranded with core end processing 	0.5 1.5 mm²				
finely stranded without core end processing	0.5 2.5 mm²				
type of connectable conductor cross-sections					
 for auxiliary contacts 					
— solid or stranded	2x (0.5 2.5 mm²)				
 — finely stranded with core end processing 	2x (0.5 1.5 mm²)				
 — finely stranded without core end processing 	2x (0.5 2.5 mm²)				
 for AWG cables for auxiliary contacts 	2x (20 14)				
AWG number as coded connectable conductor cross					
section					

 for main contact 	ts		18 1				
 for auxiliary con 			18 1 20 14				
afety related data							
product function							
 mirror contact a 	ccording to IEC 60947-4-1		Yes				
 positively driven 	operation according to IEC	60947-5-1	No				
B10 value with high de	B10 value with high demand rate according to SN 31920		1 000 000				
proportion of danger	proportion of dangerous failures						
 with low deman 	d rate according to SN 3192	20	40 %				
 with high demar 	nd rate according to SN 319	920	73 %				
	ow demand rate according t		100 FIT				
T1 value for proof test 61508	interval or service life acco	rding to IEC	20 a				
	n the front according to I	-C 60529	IP20				
-	the front according to IEC			or vertical contact	from the front		
suitability for use			iniger eare, i				
 safety-related sy 	witching OFF		Yes				
Certificates/ approvals	0						
General Product App							
contraining							
(Sfr Sfr Sfr Sfr Sfr Sfr Sfr Sfr Sfr Sfr		<u>Confirmation</u>	1	(H) UL	KC	EAC	
EMC	Functional Safety/Safety of Ma- chinery	Declaration of	ion of Conformity		Test Certificates		
RCM	<u>Type Examination Cer-</u> <u>tificate</u>	UK CA	K CE EG-Konf.		<u>Special Test Certific-</u> <u>ate</u>	Type Test Certific- ates/Test Report	
Marine / Shipping							
ABS	BUREAU VERITAS		Llovd's Register urs		PRS	RINA	
Marine / Shipping	other		Raily	vay	Dangerous Good	Environment	
KMRS RMRS	Confirmation	<u>Confirmation</u>	<u>ı Vibra</u>	ttion and Shock	Transport Information	Environmental Con- firmations	
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 of Please contact your lo EAC relevant market (Information on the pa	on the renewal of the curr cal Siemens office on the s other than the sanctioned E	ent EAC certifica tatus of validity of EAEU member stat	tes. the EAC certifi	cation if you inten	d to import or offer to supp	ly these products to an	
	vnloadcenter (Catalogs, E						
Industry Mall (Online https://mall.industry.sie Cax online generator	e ordering system) emens.com/mall/en/en/Cata	•••					
Service&Support (Ma https://support.industry	ion.siemens.com/WW/CAX anuals, Certificates, Chara y.siemens.com/cs/ww/en/ps duct images, 2D dimensio	acteristics, FAQs 3/3RT2037-3AK60)		_		
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,)							

Subject to change without notice © Copyright Siemens http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2037-3AK60&lang=en Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RT2037-3AK60/char Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2037-3AK60&objecttype=14&gridview=view1





last modified:

2/10/2023 🖸