# **SIEMENS**

Data sheet 3RT2047-1AK60



Contactor, AC-3, 55 kW/400 V 1 NO+1 NC, 110 V AC/50 Hz 120 V/60 Hz 3-pole, 3 NO, Size S3 Screw terminal

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S3
product extension	
<ul> <li>function module for communication</li> </ul>	No
auxiliary switch	Yes
power loss [W] for rated value of the current at AC in hot operating state	23.7 W
• per pole	7.9 W
power loss [W] for rated value of the current without load current share typical	22 W
insulation voltage	
• of main circuit with degree of pollution 3 rated value	1 000 V
<ul> <li>of auxiliary circuit with degree of pollution 3 rated value</li> </ul>	690 V
surge voltage resistance	
<ul> <li>of main circuit rated value</li> </ul>	8 kV
of auxiliary circuit rated value	6 kV
maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1	690 V
shock resistance at rectangular impulse	
• at AC	6.7 g / 5 ms, 4.0 g / 10 ms
shock resistance with sine pulse	
• at AC	10.6 g / 5 ms, 6.3 g / 10 ms
mechanical service life (switching cycles)	
of contactor typical	10 000 000
<ul> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> </ul>	5 000 000
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000
reference code acc. to IEC 81346-2	Q
Substance Prohibitance (Date)	01.03.2017
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +60 °C
during storage	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C acc. 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
operational current	
<ul> <li>at AC-1 at 400 V at ambient temperature 40 °C</li> </ul>	130 A
rated value	
• at AC-1	
<ul> <li>up to 690 V at ambient temperature 40 °C rated value</li> </ul>	130 A
<ul> <li>up to 690 V at ambient temperature 60 °C rated value</li> </ul>	110 A
• at AC-3	
— at 400 V rated value	110 A
— at 500 V rated value	110 A
— at 690 V rated value	98 A
— at 1000 V rated value	30 A
<ul> <li>at AC-4 at 400 V rated value</li> </ul>	97 A
● at AC-5a up to 690 V rated value	120 A
<ul> <li>at AC-5b up to 400 V rated value</li> </ul>	110 A
• at AC-6a	
<ul> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	98 A
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	98 A
<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	98 A
<ul> <li>up to 690 V for current peak value n=20 rated value</li> <li>at AC-6a</li> </ul>	98 A
— up to 230 V for current peak value n=30 rated value	65.3 A
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	65.3 A
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	65.3 A
— up to 690 V for current peak value n=30 rated value	65.3 A
minimum cross-section in main circuit at maximum AC-1 rated value	50 mm <sup>2</sup>
operational current for approx. 200000 operating cycles at AC-4	
at 400 V rated value	46 A
at 690 V rated value	36 A
operational current	
at 1 current path at DC-1	
— at 24 V rated value	100 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 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	1.0 A
with 3 current paths in series at DC-1	170
— at 24 V rated value	100 A
— at 110 V rated value	100 A
	80 A
— at 220 V rated value	
— at 440 V rated value	4.5 A

at 24 V rated value		
		2.6 A
	<ul> <li>at 1 current path at DC-3 at DC-5</li> </ul>	
	— at 110 V rated value	
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 440 V rated value	0.15 A
		0.06 A
	<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>	
	— at 24 V rated value	100 A
	— at 110 V rated value	100 A
■ with 3 current paths in series at DC-3 at DC-5     ■ at 24 V rated value     ■ at 110 V rated value     ■ at 220 V rated value     ■ at 220 V rated value     ■ at 220 V rated value     ■ at 240 V rated value     ■ at 600 V rated value     ■ at 600 V rated value     ■ at 600 V rated value     ■ at AC-2 at 400 V rated value     ■ at AC-3 at 400 V rated value     ■ at 800 V rated value     ■ at 400 V rated value     ■ at 500 V rated value     ■ at 1000 V rated value     ■ at 400 V rated value     ■ at 600 V rated value     ■ at 600 V rated value     ■ at 900 V roter pack 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=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 600 V for current peak value n=30 rated value     ■ up to 600 V for current peak value n=30 rated value     ■ initited to 5 s switching at zero current maximum     ■ limited to 10 s switching at zero current maximum     ■ limited to 10 s switching at zero current maximum     ■ limited to 10 s switching at zero current maximum     ■ limited to 10 s switching at zero current maximum     ■ limited to 10 s switching at zero current maximum     ■ limited to 10 s switching at zero current maximum     ■ limited to 10 s switching at zero current maximum     ■ limited to 10 s switching at zero current maximum     ■ limited to 10 s switching at z	— at 220 V rated value	7 A
• with 3 current paths in series at DC-3 at DC-5  — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value • at AC-3 — at 230 V rated value — at 400 V rated value — at 600 V rated value — at 600 V rated value — at 600 V rated value — 30 kW — at 500 V rated value — 37 kW — at 500 V rated value — at 600 V rated value — at 400 V rated value — at 900 V for current pack 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 500 V for current peak value n=30 rated v	— at 440 V rated value	0.42 A
	— at 600 V rated value	0.16 A
- at 110 V rated value - at 220 V rated value - 20 A B A - 21 400 V rated value - 20 A B A - 21 400 V rated value - 20 A B A - 21 400 V rated value - 20 A B A - 21 400 V rated value - 20 A B A - 21 400 V rated value - 20 A B A - 21 400 V rated value - 20 A B A - 21 400 V rated value - 20 A B A B A B A B A B A B A B A B A B A	<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul>	
	— at 24 V rated value	100 A
- at 440 V rated value - at 600 V rated value - 35 K W    sal AC-2 at 400 V rated value	— at 110 V rated value	100 A
operating power  at AC-2 at 400 V rated value  at AC-3  — at 230 V rated value  — at 400 V rated value  — at 400 V rated value  — at 500 V rated value  — at 500 V rated value  — at 500 V rated value  — at 600 V rated value  operating power for approx. 200000 operating cycles at AC-4  at 400 V rated value  a) 8 kW  operating apparent power at AC-8a  • 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  operating apparent power at AC-8a  • 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 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  • 100 K.V.A  55 K.V.A  78 K.V.A  1960 A; Use minimum cross-section acc. to AC-1 rated value  1005 A; Use minimum cross-section acc. to AC-1 rated value  1005 A; Use minimum cross-section acc. to AC-1 rated value  1005 A; Use minimum cross-section acc. to AC-1 rated value  1005 A; Use minimum cross-section acc. to AC-1 rated value  1005 A; Use minimum cross-section acc. to AC-1 rated value  1005 A; Use minimum cross-section acc. to AC-1 rated value  1005 A; Use minimum cross-section acc. to AC-1 rated value  1005 A; Use minimum cross-section acc	— at 220 V rated value	35 A
operating power  at AC-2 at 400 V rated value  at 230 V rated value  at 55 kW  at AC-3  at 230 V rated value  at 500 V rated value  at 500 V rated value  55 kW  55 kW  55 kW  at 690 V rated value  90 kW  37 kW  operating power for approx. 200000 operating cycles at AC-4  at 400 V rated value  operating power for approx. 200000 operating cycles at AC-4  at 400 V rated value  24.3 kW  32.9 kW  operating apparent power at AC-5a  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 600 V for current peak value n=30 rated value  up to 500 V for current peak value n=30 rated value  up to 500 V for current peak value n=30 rated value  up to 500 V for current peak value n=30 rated value  up to 500 V for current peak value n=30 rated value  up to 500 V for current peak value n=30 rated value  up to 500 V for current peak value n=30 rated value  up to 500 V for current peak value n=30 rated value  up to 500 V for current peak value n=30 rated value  up to 690 V for current peak value n=30 rated value  short-time withstand current in cold operating state up to 40 °C  ilimited to 1 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 30 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 30 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 30 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 30 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 30 s switching at zero current maximum  ilimited to 50 s switching at	— at 440 V rated value	0.8 A
at AC-2 at 400 V rated value at AC-3 at AC-3 at AC-3 at AC-3 at AC-3 at AC-0 at 400 V rated value at 400 V rated value 55 kW at 400 V rated value 90 kW at 1000 V rated value 90 kW at 1000 V rated value 24.3 kW  operating power for approx. 200000 operating cycles at AC-4 at 400 V rated value 24.3 kW 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 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=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 v	— 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 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  at 60 V rated value  at 690 V rated value  at 690 V rated value  at 60 V rated	operating power	
- 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 690 V rated value - up to 230 V for current peak value n=20 rated value - up to 500 V for current peak value n=20 rated value - up to 500 V for current peak value n=20 rated value - up to 690 V for current peak value n=20 rated value - up to 690 V for current peak value n=30 rated value - up to 690 V	<ul> <li>at AC-2 at 400 V rated value</li> </ul>	55 kW
- 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 1000 V rated value - at 400 V rated value - at 500 V rated value - up to 230 V for current peak value n=20 rated value - up to 400 V for current peak value n=20 rated value - up to 500 V for current peak value n=20 rated value - up to 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 40 °C - ilmited to 1 s switching at zero current maximum - ilmited to 5 s switching at zero current maximum - ilmited to 60 s switching at zero current maximum - ilmited to 60 s switching at zero current maximum - ilmited to 60 s switching at zero current maximum - ilmited to 60 s switching at zero current maximum - ilmited to 60 s switching at zero current maximum - ilmited to 60 s switching at zero current maximum - ilmited to 60 s switching at zero current maximum - ilmited to 60 s switching at zero current maximum - ilmited to 60 s switching at zero current maximum - ilmited to 60 s switching at zero current maximum - ilmited to 60 s switching at zero current maximum - ilmited to 60 s switching at zero current maximum - ilmited to 60 s switching at zero current maximum - ilmited to 60 s switching at zero current maximum - ilmited to 60 s switching at zero current maximum - ilmited to 60 s switching at zero current maximum - ilmited to 60 s switchi	• at AC-3	
- 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 - at 400 V rated value - at 690 V rated va	— at 230 V rated value	30 kW
- at 690 V rated value - at 1000 V rated value 0 operating power for approx. 200000 operating cycles at AC-4  • at 400 V rated value • at 690 V rated value • at 690 V rated value • at 690 V rated value • up to 230 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 230 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 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 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 • to 65.5 kV-A  78 kV-A  1960 A; Use minimum cross-section acc. to AC-1 rated value 1502 A; Use minimum cross-section acc. to AC-1 rated value 1502 A; Use minimum cross-section acc. to AC-1 rated value 1502 A; Use minimum cross-section acc. to AC-1 rated value 1502 A; Use minimum cross-section acc. to AC-1 rated value 1502 A; Use minimum cross-section acc. to AC-1 rated value 1502 A; Use minimum cross-section acc. to AC-1 rated value 1502 A; Use minimum cross-section acc. to AC-1 rated value 1502 A; Use minimum cross-section acc. to AC-1 rated value 1502 A; Use minimum cross-section acc. to AC-1 rated value 1502 A; Use minimum cross-section acc. to AC-1 rated value 1502 A; Use minimum cross-section ac	— at 400 V rated value	55 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 690 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 690 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • limited to 1 s switching at zero current maximum • limited to 1 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 60 s switching at zero curre	— at 500 V rated value	75 kW
operating power for approx. 200000 operating cycles at AC-4  • at 400 V rated value • at 690 V rated value • at 690 V rated value • up to 230 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 230 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 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 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 40 °C • limited to 1 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 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 • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • lim	— at 690 V rated value	90 kW
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 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 230 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • 1906 A; Use minimum cross-section acc. to AC-1 rated value • 1996 A; Use minimum cross-section acc. to AC-1 rated value • 1996 A; Use minimum cross-section acc. to AC-1 rated value • 1996 A; Use minimum cross-section acc. to AC-1 rated value • 1996 A; Use minimum cross-section acc. to AC-1 rated value • 1906 A; Use minimum cross-section acc. to AC-1 rated value • 190	— at 1000 V rated value	37 kW
at 400 V rated value at 690 V rated value  operating apparent power at AC-6a  up to 230 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a  up to 230 V for current peak value n=20 rated value operating apparent power at AC-6a  up to 690 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 690 V for current peak value n=30 rated value op to 690 V for current peak value n=30 rated value op to 690 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 690 V for current peak value n=30 rated value op to 690 V for current peak value n=30 rated value op to 690 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 500 V for current peak value n=30 rated value op to 500 AC-1 rated value op to 500 AC-1 rated value op to 500 AC-1 rated va	operating power for approx. 200000 operating cycles	
at 690 V rated value  operating apparent power at AC-6a  up to 230 V for current peak value n=20 rated value  up to 690 V for current peak value n=20 rated value  up to 690 V for current peak value n=20 rated value  operating apparent power at AC-6a  up to 230 V for current peak value n=20 rated value  operating apparent power at AC-6a  up to 230 V for current peak value n=30 rated value  operating apparent power at AC-6a  up to 400 V for current peak value n=30 rated value  oup to 500 V for current peak value n=30 rated value  oup to 500 V for current peak value n=30 rated value  oup to 500 V for current peak value n=30 rated value  oup to 500 V for current peak value n=30 rated value  oup to 500 V for current peak value n=30 rated value  oup to 500 V for current peak value n=30 rated value  oup to 500 V for current peak value n=30 rated value  oup to 500 V for current peak value n=30 rated value  oup to 500 V for current peak value n=30 rated value  oup to 500 V for current peak value n=30 rated value  oup to 500 V for current peak value n=30 rated value  oup to 500 V for current peak value n=30 rated value  oup to 500 V for current peak value n=30 rated value  oup to 500 V for current peak value n=30 rated value  oup to 500 V for current peak value n=30 rated value  oup to 500 V for current peak value n=30 rated value  oup to 500 V for current peak value n=30 rated value  1 500 A; Use minimum cross-section acc. to AC-1 rated value  1 500 A; Use minimum cross-section acc. to AC-1 rated value  1 500 A; Use minimum cross-section acc. to AC-1 rated value  1 500 A; Use minimum cross-section acc. to AC-1 rated value  1 500 A; Use minimum cross-section acc. to AC-1 rated value  1 500 A; Use minimum cross-section acc. to AC-1 rated value  1 500 A; Use minimum cross-section acc. to AC-1 rated value  1 500 A; Use minimum cross-section acc. to AC-1 rated value  1 500 A; Use minimum cross-section acc. to AC-1 rated value  1 500 A; Use minimum cross-section acc. to AC-1 rated value  1 500 A; Use minimum cross-section ac	at AC-4	
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 500 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 690 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 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 • limited to 1 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum  no-load switching frequency • at AC  operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-2 maximum • at AC-3 maximum • at AC-3 maximum • at AC-4 maximum • at AC-3 maximum • at AC-4 maximum • at AC-3 maximum • at AC-3 maximum • at AC-3 maximum • at AC-4 maximum • at AC-3 maximum • at AC-4 maximum • at AC-5 maximum • at AC-4 maximum • at AC-5 maximum • at AC-5 maximum • at AC-6 maximum • at AC-7 maximum • at AC-8 maximum • at AC-9 maximum • at AC-9 maximum • at AC-1 maximum • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-3 maximum • at AC-4 maximum • at AC-5 maximum • at AC-7 maximum • at AC-8 maximum • at AC-9 maximum • at AC-9 maximum • at AC-9 maximum • at AC-1 maximum • at AC-1 maximum • at AC-1 maximum • at AC-1 maximum • at AC-3 maximum • at AC-3 maximum • at AC-4 maximum	<ul> <li>at 400 V rated value</li> </ul>	24.3 kW
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 500 V for current peak value n=20 rated value up to 690 V for current peak value n=30 rated value up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 40 °C elimited to 1 s switching at zero current maximum elimited to 5 s switching at zero current maximum elimited to 10 s switching at zero current maximum elimited to 30 s switching at zero current maximum elimited to 80 s switching at zero current maximum elimited to 80 s switching at zero current maximum elimited to 80 s switching at zero current maximum elimited to 80 s switching at zero current maximum for load switching frequency e at AC  operating frequency e at AC-1 maximum eat AC-2 maximum eat AC-2 maximum eat AC-3 maximum eat AC-3 maximum eat AC-4 maximum eat AC-3 maximum eat AC-3 maximum eat AC-4 maximum eat AC-3 maximum eat AC-4 maximum eat AC-5 maximum eat AC-5 maximum eat AC-6 maximum eat AC-7 maximum eat AC-8 maximum eat AC-9 maximum eat AC-9 maximum eat AC-9 maximum eat AC-1 maximum eat AC-1 maximum eat AC-3 maximum eat AC-3 maximum eat AC-3 maximum eat AC-3 maximum eat AC-4 maximum eat AC-5 maximum eat AC-6 maximum eat AC-7 maximum eat AC-9 m	at 690 V rated value	32.9 kW
up to 400 V for current peak value n=20 rated value up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value operating apparent power at AC-6a up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C  ilimited to 1 s switching at zero current maximum ilimited to 5 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 a limited to 60 s switching at zero current maximum  no-load switching frequency at AC-1 maximum at AC-2 maximum at AC-2 maximum at AC-3 maximum at AC-3 maximum at AC-4 maximum at AC-4 maximum at AC-4 maximum at AC-5 maximum at AC-6 maximum at AC-6 mostrol supply voltage at AC at Sto Hz rated value  100 V	operating apparent power at AC-6a	
up to 500 V for current peak value n=20 rated value     up to 690 V for current peak value n=20 rated value     operating apparent power at AC-6a     up to 230 V for current peak value n=30 rated value     up to 500 V for current peak value n=30 rated value     up to 500 V for current peak value n=30 rated value     up to 690 V for current peak value n=30 rated value     up to 690 V for current peak value n=30 rated value     short-time withstand current in cold operating state up to 40 °C     elimited to 1 s switching at zero current maximum     elimited to 10 s switching at zero current maximum     elimited to 10 s switching at zero current maximum     elimited to 30 s switching at zero current maximum     elimited to 60 s switching at zero current maximum     elimited to 60 s switching at zero current maximum     elimited to 60 s switching at zero current maximum     orload switching frequency     e at AC     operating frequency     e at AC-1 maximum     e at AC-2 maximum     e at AC-3 maximum     e at AC-3 maximum     e at AC-4 maximum     e at AC-5 maximum     e at AC-4 maximum     e at AC-5 maximum     e at AC-5 maximum     e at AC-6 maximum     e at AC-7 maximum     e at AC-8 maximum     e at AC-9 max	<ul> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	39 kV·A
• up to 690 V for current peak value n=20 rated value     • up to 230 V for current peak value n=30 rated value     • up to 400 V for current peak value n=30 rated value     • up to 500 V for current peak value n=30 rated value     • up to 690 V for current peak value n=30 rated value     • up to 690 V for current peak value n=30 rated value     • up to 690 V for current peak value n=30 rated value     • up to 690 V for current peak value n=30 rated value     • 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 1 s switching at zero current maximum     • limited to 10 s switching at zero current maximum     • limited to 10 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • lim	<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	67 kV·A
operating apparent power at AC-6a  • up to 230 V for current peak value n=30 rated value  • up to 400 V for current peak value n=30 rated value  • up to 500 V for current peak value n=30 rated value  • up to 690 V for current peak value n=30 rated value  short-time withstand current in cold operating state up to 40 °C  • limited to 1 s switching at zero current maximum  • limited to 5 s switching at zero current maximum  • limited to 10 s switching at zero current maximum  • limited to 30 s switching at zero current maximum  • limited to 30 s switching at zero current maximum  • limited to 60 s switching at	<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	84 kV·A
• up to 230 V for current peak value n=30 rated value     • up to 400 V for current peak value n=30 rated value     • up to 500 V for current peak value n=30 rated value     • up to 690 V for current peak value n=30 rated value     • up to 690 V for current peak value n=30 rated value     • up to 690 V for current peak value n=30 rated value     • up to 690 V for current peak value n=30 rated value     • 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     • limited to 1 s switching at zero current maximum     • limited to 1 s switching at zero current maximum     • limited to 10 s switching at zero current maximum     • limited to 30 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     •	• up to 690 V for current peak value n=20 rated value	117 kV·A
• up to 400 V for current peak value n=30 rated value     • up to 500 V for current peak value n=30 rated value     • up to 690 V for current peak value n=30 rated value     short-time withstand current in cold operating state     up to 40 °C      • limited to 1 s switching at zero current maximum     • limited to 5 s switching at zero current maximum     • limited to 10 s switching at zero current maximum     • limited to 30 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     • l	operating apparent power at AC-6a	
• up to 500 V for current peak value n=30 rated value     • up to 690 V for current peak value n=30 rated value  short-time withstand current in cold operating state up to 40 °C  • limited to 1 s switching at zero current maximum  • limited to 1 s switching at zero current maximum  • limited to 10 s switching at zero current maximum  • limited to 10 s switching at zero current maximum  • limited to 30 s switching at zero current maximum  • limited to 60 s switching at zero current maximum  • limited to 60 s switching at zero current maximum  no-load switching frequency  • at AC  • at AC-3 maximum  • at AC-4 maximum  200 1/h  Control circuit/ Control  type of voltage of the control supply voltage  • at 50 Hz rated value  1 96. A; Use minimum cross-section acc. to AC-1 rated value  1 095 A; Use minimum cross-section acc. to AC-1 rated value  5 000 1/h  5 000 1/h  5 000 1/h  6 AC  Control supply voltage at AC  • at 50 Hz rated value  1 10 V	<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	26 kV·A
• up to 690 V for current peak value n=30 rated value     short-time withstand current in cold operating state     up to 40 °C      • limited to 1 s switching at zero current maximum     • limited to 5 s switching at zero current maximum     • limited to 10 s switching at zero current maximum     • limited to 30 s switching at zero current maximum     • limited to 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     no-load switching frequency     • at AC  operating frequency     • at AC-2 maximum     • at AC-3 maximum     • at AC-4 maximum     200 1/h  Control circuit/ Control  type of voltage of the control supply voltage     • at 50 Hz rated value  78 kV·A  1 960 A; Use minimum cross-section acc. to AC-1 rated value 1 095 A; Use minimum cross-section acc. to AC-1 rated value 562 A; Use minimum cross-section acc. to AC-1 ra	<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	45.2 kV·A
short-time withstand current in cold operating state up to 40 °C  • limited to 1 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 30 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum  no-load switching frequency • at AC  operating frequency • 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-5 to AC-1 rated value  AC  control supply voltage at AC • at 50 Hz rated value  1 960 A; Use minimum cross-section acc. to AC-1 rated value  1 095 A; Use minimum cross-section acc. to AC-1 rated value  5 000 1/h  095 A; Use minimum cross-section acc. to AC-1 rated value  1 095 A; Use minimum cross-section acc. to AC-1 rated value  5 000 1/h  5 000 1/h  AC  AC  1 000 1/h  AC  AC  1 000 1/h  AC  1 000 1/h  1	<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	56.5 kV·A
up to 40 °C  • limited to 1 s switching at zero current maximum  • limited to 5 s switching at zero current maximum  • limited to 10 s switching at zero current maximum  • limited to 30 s switching at zero current maximum  • limited to 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  for 2 A; Use minimum cross-section acc. to AC-1 rated value  707 A; Use minimum cross-section acc. to AC-1 rated value  562 A; Use minimum cross-section acc. to AC-1 rated value  562 A; Use minimum cross-section acc. to AC-1 rated value  707 A; Use minimum cross-section acc. to AC-1 rated value  708 A; Use minimum cross-section acc. to AC-1 rated value  709 A; Use minimum cross-section acc. to AC-1 rated value  709 A; Use minimum cross-section acc. to AC-1 rated value  709 A; Use minimum cross-section acc. to AC-1 rated value  709 A; Use minimum cross-section acc. to AC-1 rated value  709 A; Use minimum cross-section acc. to AC-1 rated value  709 A; Use minimum cross-section acc. to AC-1 rated value  709 A; Use minimum cross-section acc. to AC-1 rated value  709 A; Use minimum cross-section acc. to AC-1 rated value  709 A; Use minimum cross-section acc. to AC-1 rated value  709 A; Use minimum cross-section acc. to AC-1 rated value  709 A; Use minimum cross-section acc. to AC-1 rated value  709 A; Use minimum cross-section acc. to AC-1 rated value  709 A; Use minimum cross-section acc. to AC-1 rated value  709 A; Use minimum cross-section acc. to AC-1 rated value  709 A; Use minimum cross-section acc. to AC-1 rated value  709 A; Use minimum cross-section acc. to AC-1 rated value  709 A; Use minimum cross-section acc. to AC-1 rated value	• up to 690 V for current peak value n=30 rated value	78 kV·A
<ul> <li>limited to 1 s switching at zero current maximum</li> <li>limited to 5 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 20 s switching at zero current maximum</li> <li>limited to 20 s switching at zero current maximum</li> <li>limited to 20 s switching at zero current maximum</li> <li>limited to 20 s switching at zero current maximum</li> <li>limited to 20 s swi</li></ul>		
<ul> <li>limited to 5 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>mo-load switching frequency</li> <li>at AC</li> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-5 maximum</li> <li>at AC-4 maximum</li> <li>a</li></ul>	•	1 060 A: Use minimum cross section and to AC 4 rated value
<ul> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>s62 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>at AC</li> <li>operating frequency</li> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> <li></li></ul>		
<ul> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>no-load switching frequency</li> <li>at AC</li> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-5 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-5 maximum</li> <li>at AC-4 maximum</li> <li>at AC-5 maximum</li> <li>at AC-6 maximum</li> <li>at AC-7 maximum</li> <li>at AC-8 maximum</li> <li>at AC-9 maximum</li> <li>at AC-9 maximum</li> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> <li>at AC-5 maximum</li> <li>at AC-6 maximum</li> <li>at AC-7 maximum</li> <li>at AC-8 maximum</li> <li>at AC-9 maximum</li></ul>		
<ul> <li>limited to 60 s switching at zero current maximum</li> <li>no-load switching frequency</li> <li>at AC</li> <li>operating frequency</li> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-5 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-5 maximum</li> <li>at AC-4 maximum</li> <li>at SO Hz rated value</li> <li>at 50 Hz rated value</li> </ul>		
no-load switching frequency  • at AC  operating frequency  • at AC-1 maximum  • at AC-2 maximum  • at AC-3 maximum  • at AC-3 maximum  • at AC-4 maximum  • at AC-4 maximum  • at AC-4 maximum  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  5 000 1/h  900 1/h  850 1/h  AC  AC		
<ul> <li>at AC</li> <li>operating frequency</li> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>200 1/h</li> </ul> Control circuit/ Control type of voltage of the control supply voltage <ul> <li>AC</li> <li>control supply voltage at AC</li> <li>at 50 Hz rated value</li> <li>110 V</li> </ul>		502 A, OSC Millimum GOSS-Section acc. to AC-1 fateu value
operating frequency  • at AC-1 maximum  • at AC-2 maximum  • at AC-3 maximum  • at AC-3 maximum  • at AC-4 maximum  • at AC-4 maximum  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  900 1/h  850 1/h  200 1/h  Control circuit/ Control  110 V		5 000 1/h
<ul> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>200 1/h</li> </ul> Control circuit/ Control type of voltage of the control supply voltage <ul> <li>AC</li> <li>control supply voltage at AC</li> <li>at 50 Hz rated value</li> <li>110 V</li> </ul>		0 000 1/11
<ul> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>200 1/h</li> <li>Control circuit/ Control</li> <li>type of voltage of the control supply voltage</li> <li>acontrol supply voltage at AC</li> <li>at 50 Hz rated value</li> <li>at 50 Hz rated value</li> </ul>		900 1/h
<ul> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> <li>200 1/h</li> <li>Control circuit/ Control</li> <li>type of voltage of the control supply voltage</li> <li>control supply voltage at AC</li> <li>at 50 Hz rated value</li> <li>110 V</li> </ul>		
<ul> <li>at AC-4 maximum</li> <li>Control circuit/ Control</li> <li>type of voltage of the control supply voltage</li> <li>control supply voltage at AC</li> <li>at 50 Hz rated value</li> <li>110 V</li> </ul>		
type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  AC  110 V		
type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  AC  110 V		200 1/11
control supply voltage at AC  • at 50 Hz rated value  110 V		AC
• at 50 Hz rated value 110 V		AC
		110 V
■ at ou riz rated value		
	■ at ou riz rateu value	12U V

operating range factor control supply voltage rated value of magnet coil at AC	
• at 50 Hz	0.8 1.1
	0.8 1.1
• at 60 Hz	0.8 1.1
apparent pick-up power of magnet coil at AC	000 1/4
• at 50 Hz	326 V·A
• at 60 Hz	326 V·A
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 V·A
● at 60 Hz	22 V·A
inductive power factor with the holding power of the	
coil	0.00
• at 50 Hz	0.36
• at 60 Hz	0.4
closing delay	42 50
• at AC	13 50 ms
opening delay	40 04
• 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	1
instantaneous contact	4
number of NO contacts for auxiliary contacts instantaneous contact	1
operational current at AC-12 maximum	10 A
operational current at AC-15	10 A
at 230 V rated value	6 A
at 400 V rated value	3 A
	2 A
<ul><li>at 500 V rated value</li><li>at 690 V rated value</li></ul>	1 A
	TA .
operational current at DC-12	40.4
• 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
at 125 V rated value	2 A
at 220 V rated value	1 A
at 600 V rated value	0.15 A
operational current at DC-13	40.4
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	1 A
• 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	96 A
at 600 V rated value	99 A
yielded mechanical performance [hp]	
<ul> <li>for single-phase AC motor</li> </ul>	
— at 110/120 V rated value	10 hp
— at 230 V rated value	20 hp
• for 3-phase AC motor	
— at 200/208 V rated value	30 hp

400000000000000000000000000000000000000	40.1
— at 220/230 V rated value	40 hp
— at 460/480 V rated value	75 hp
— at 575/600 V rated value	100 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	
<ul> <li>— with type of coordination 1 required</li> </ul>	gG: 250 A (690 V, 100 kA), aM: 160 A (690 V, 100 kA), BS88: 200 A (415 V, 80 kA)
<ul> <li>— with type of assignment 2 required</li> </ul>	gG: 200A (690V,100kA), aM: 100A (690V,100kA), BS88: 160A (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 standard mounting rail according to DIN EN 60715
side-by-side mounting	Yes
height	140 mm
width	70 mm
depth	152 mm
required spacing	
<ul> <li>with side-by-side mounting</li> </ul>	
— 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	10 11111
— forwards	20 mm
— upwards	10 mm
— downwards	10 mm
— at the side	10 mm
1000000	10 111111
Connections/ Terminals	
type of electrical connection	
for main current circuit	screw-type terminals
<ul> <li>for auxiliary and control circuit</li> </ul>	screw-type terminals
at contactor for auxiliary contacts	Screw-type terminals
of magnet coil	Screw-type terminals
type of connectable conductor cross-sections	
<ul> <li>for main contacts</li> </ul>	
<ul> <li>finely stranded with core end processing</li> </ul>	2x (2.5 35 mm²), 1x (2.5 50 mm²)
at AWG cables for main contacts	2x (10 1/0), 1x (10 2)
connectable conductor cross-section for main contacts	
• solid	2.5 16 mm²
<ul><li>stranded</li></ul>	6 70 mm²
finely stranded with core end processing	2.5 50 mm²
connectable conductor cross-section for auxiliary contacts	
<ul> <li>solid or stranded</li> </ul>	0.5 2.5 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm²
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
	( ,

<ul> <li>at AWG cables for auxiliary contacts</li> </ul>	2x (20 16), 2x (18 14)
AWG number as coded connectable conductor cross section	
<ul> <li>for main contacts</li> </ul>	10 2
<ul> <li>for auxiliary contacts</li> </ul>	20 14
Safety related data	
B10 value with high demand rate acc. to SN 31920	1 000 000
proportion of dangerous failures	
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	40 %
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	73 %
failure rate [FIT] with low demand rate acc. to SN 31920	100 FIT
T1 value for proof test interval or service life acc. to IEC 61508	20 y
protection class IP on the front acc. to IEC 60529	IP20
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front
suitability for use	
<ul> <li>safety-related switching on</li> </ul>	Yes
<ul> <li>safety-related switching OFF</li> </ul>	Yes
Cartificates/ approvals	

### Certificates/ approvals

### **General Product Approval**





Confirmation



<u>KC</u>



EMC	Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates
RCM	Type Examination Certificate	UK Declaration of Conformity  EG-Konf.	Type Test Certificates/Test Report  Special Test Certificates  ate

## Marine / Shipping













other	Railway	Dangerous Good
Confirmation	Vibration and Shock	Transport Informa-

#### Further information

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=3RT2047-1AK60

Cax online generator

 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT2047-1AK60}$ 

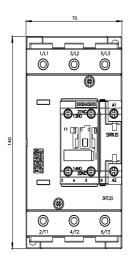
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT2047-1AK60

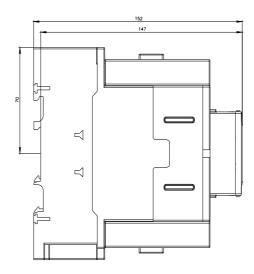
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

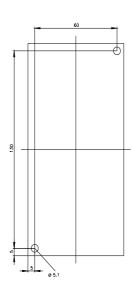
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2047-1AK60\&lang=enderviewer.}}$ 

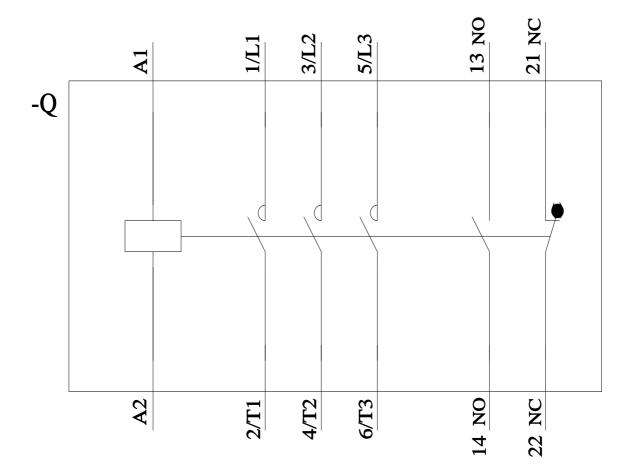
Characteristic: Tripping characteristics, I²t, Let-through current <a href="https://support.industry.siemens.com/cs/ww/en/ps/3RT2047-1AK60/char">https://support.industry.siemens.com/cs/ww/en/ps/3RT2047-1AK60/char</a>

Further characteristics (e.g. electrical endurance, switching frequency)
<a href="http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2047-1AK60&objecttype=14&gridview=view1">http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2047-1AK60&objecttype=14&gridview=view1</a>









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