## SIEMENS

## Data sheet

## 3RT1066-6AP36



power contactor, AC-3e/AC-3 300 A, 160 kW / 400 V, AC (50-60 Hz) / DC Uc: 220-240 V 3-pole, auxiliary contacts 2 NO + 2 NC drive: conventional main circuit: busbar control and auxiliary circuit: screw terminal

product brand name	SIRIUS	
product designation	Power contactor	
product type designation	3RT1	
General technical data		
size of contactor	S10	
product extension		
<ul> <li>function module for communication</li> </ul>	No	
auxiliary switch	Yes	
power loss [W] for rated value of the current		
<ul> <li>at AC in hot operating state</li> </ul>	66 W	
<ul> <li>at AC in hot operating state per pole</li> </ul>	22 W	
<ul> <li>without load current share typical</li> </ul>	7.4 W	
type of calculation of power loss depending on pole	quadratic	
insulation voltage		
<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	1 000 V	
<ul> <li>of auxiliary circuit with degree of pollution 3 rated value</li> </ul>	500 V	
surge voltage resistance		
<ul> <li>of main circuit rated value</li> </ul>	8 kV	
<ul> <li>of auxiliary circuit rated value</li> </ul>	6 kV	
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	690 V	
shock resistance at rectangular impulse		
• at AC	8,5g / 5 ms, 4,2g / 10 ms	
• at DC	8,5g / 5 ms, 4,2g / 10 ms	
shock resistance with sine pulse		
• at AC	13,4g / 5 ms, 6,5g / 10 ms	
• at DC	13,4g / 5 ms, 6,5g / 10 ms	
mechanical service life (operating cycles)		
<ul> <li>of contactor typical</li> </ul>	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 according to IEC 81346-2	Q	
Substance Prohibitance (Date)	05/01/2012	
SVHC substance name	Lead - 7439-92-1	
Weight	6.565 kg	
Ambient conditions		
installation altitude at height above sea level maximum	2 000 m	

ambient temperature	
• during operation	-25 +60 °C
during operation     during storage	-25 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30	95 %
maximum	
Environmental footprint	
Environmental Product Declaration(EPD)	Yes
Global Warming Potential [CO2 eq] total	580 kg
Global Warming Potential [CO2 eq] during manufacturing	26.3 kg
Global Warming Potential [CO2 eq] during operation	559 kg
Global Warming Potential [CO2 eq] after end of life	-4.89 kg
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
<ul> <li>at AC-3 rated value maximum</li> </ul>	1 000 V
at AC-3e rated value maximum	1 000 V
operational current	
<ul> <li>at AC-1 at 400 V at ambient temperature 40 °C rated value</li> </ul>	330 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	330 A
— up to 690 V at ambient temperature 60 °C rated value	300 A
— up to 1000 V at ambient temperature 40 °C rated value	150 A
— up to 1000 V at ambient temperature 60 °C rated value	150 A
• at AC-3	200 A
- at 400 V rated value	300 A
— at 500 V rated value	300 A
— at 690 V rated value	280 A
<ul> <li>— at 1000 V rated value</li> <li>• at AC-3e</li> </ul>	95 A
• at 400 V rated value	300 A
— at 500 V rated value	300 A
— at 690 V rated value	280 A
— at 1000 V rated value	95 A
at AC-4 at 400 V rated value	280 A
• at AC-5a up to 690 V rated value	290 A
• at AC-5b up to 400 V rated value	249 A
• at AC-6a	
— up to 230 V for current peak value n=20 rated value	292 A
— up to 400 V for current peak value n=20 rated value	292 A
— up to 500 V for current peak value n=20 rated value	292 A
— up to 690 V for current peak value n=20 rated value	280 A
— up to 1000 V for current peak value n=20 rated value	95 A
• at AC-6a	
— up to 230 V for current peak value n=30 rated value	195 A
— up to 400 V for current peak value n=30 rated value	195 A
— up to 500 V for current peak value n=30 rated value	195 A
— up to 690 V for current peak value n=30 rated value	195 A
— up to 1000 V for current peak value n=30 rated value	95 A
minimum cross-section in main circuit at maximum AC-1 rated value	185 mm²
operational current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	125 A
• at 690 V rated value	115 A

	• at 1 current path at DC-1	
	-	300 A
#120 Vrafta value38.A #120 Vrafta value08.A #160 Vrafta value00.A #160 Vrafta value00.A-		
- af 420 Y rated value0.0 Å- af 620 Y rated value0.0 Å- af 720 Y rated value0		
− aft30 V rited value06 A• with 2 current plats in sories at DC-1300 A− aft 30 V rited value300 A− aft 30 V rited value300 A− aft 32 V rite		
• with 2 current paths in series at DC-1·- af 24 V rade value300 A- at 110 V rade value300 A- at 240 V rade value300 A- af 240 V rade value4A- af 240 V rade value200 A- af 240 V rade value300 A- af 240 V		
		0.0 A
	-	200 A
- al 400 V rade Value4 A- al 600 V rade Value2 A- al 600 V rade Value300 A- al 61 V rade Value300 A- al 72 V rade Value300 A- al 610 V rade Value5 A- al 600 V rade Value11 A- al 600 V rade Value300 A- al 610 V rade Value300 A- al 610 V rade Value08 A- al 620 V rade Value018 A- al 630 V rade Value00 A- al 640 V rade Value00 A <t< td=""><td></td><td></td></t<>		
- al 600 V rated value2 A• with 3 current paths in series at DC-1 al C2 V rated value300 A- al C0 V rated value300 A- al C0 V rated value300 A- al C20 V rated value300 A- al C20 V rated value5 2 A- al C20 V rated value5 2 A- al C0 V rated value00 A- al C0 V rated value0.04 A- al C0 V rated value0.18 A- al C0 V rated value0.18 A- al C0 V rated value0.05 A- al C20 V rated value0.00 A- al C20 V rated value0.05 A- al C20 V rated value0.00 A- al C20 V		
• with 3 current paths in series at DC-1900 A		
		2 A
- al 60 V rade Value300 Å- al 10 V rade Value300 Å- al 440 V rade Value11 Å- al 440 V rade Value52 Å- al 600 V rade Value52 Å- al 600 V rade Value00 Å- al 600 V rade Value05 Å- al 600 V rade Value018 Å- al 600 V rade Value018 Å- al 600 V rade Value010 Å- al 600 V rade Value00 Å- al 600 V rade Value300 Å- al 600 V rade Value<	-	
• at 1 current path at DC-3 at DC-5900 A- at 24 V rated value300 A- at 220 V rated value0.6 A- at 220 V rated value0.18 A- at 400 V rated value0.125 A- at 400 V rated value300 A- at 240 V rated value300 A- at 200 V rated value300 A- at 40 V rated value300 A- at 100 V rated value300 A- at 40 V rated value0.55 A- at 400 V rated value0.57 A- at 400 V rated value300 A- at 40 V rated value300 A- at 40 V rated value300 A- at 40 V rated value300 A- at 400 V rated value300 A- at 400 V rated value300 A- at 400 V rated value300 A- at 600 V rated value300 A- at 600 V rated value300 A- at 200 V rated value300 A- at 400 V rated value300 A- at 200 V rated value300 A- at 400 V rated value300 A- at 400 V rated value300 A- at 400 V rated value160 kW- at 400 V rated value160 kW- at 400 V rated value160 kW- at 600 V rated value122 kW- at 600 V rated value120 kW- at 600 V rate		
		5.2 A
	-	
at 440 V rated value0.18 Å at 600 V rated value0.125 Å at 24 V rated value300 Å at 60 V rated value300 Å at 60 V rated value300 Å at 100 V rated value300 Å at 220 V rated value0.65 Å at 440 V rated value0.65 Å at 600 V rated value300 Å at 600 V rated value100 Å at 600 V rated value00 ÅW at 600 V rated value90 kW at 600 V rated value250 kW at 600 V rated value200 kW at 600 V rated value100 kW at 600 V rated value90 kW at 600 V rated value100 k		
at 600 V rated value       0.125 Å         at 24 V rated value       300 Å         at 60 V rated value       300 Å         at 60 V rated value       300 Å         at 100 V rated value       300 Å         at 220 V rated value       300 Å         at 220 V rated value       0.65 Å         at 600 V rated value       0.67 Å         at 240 V rated value       0.67 Å         at 60 V rated value       0.00 Å         at 60 V rated value       0.00 Å         at 60 V rated value       0.00 Å         at 60 V rated value       300 Å         at 60 V rated value       100 Å         at 60 V rated value       100 Å         at 60 V rated value       10 Å Å         at 230 V rated value       90 kW         at 60 V rated value       200 kW         at 60 V rated value       200 kW         at 60 V rated value       200 kW         at 230 V rated value       90 kW         at 230 V rated value       90 kW<		
• with 2 current paths in series at DC-3 at DC-5         300 A           - at 24 V rated value         300 A           - at 60 V rated value         300 A           - at 10 V rated value         300 A           - at 220 V rated value         300 A           - at 220 V rated value         0.65 A           - at 600 V rated value         0.07 A           - at 600 V rated value         0.07 A           - at 600 V rated value         300 A           - at 220 V rated value         300 A           - at 220 V rated value         300 A           - at 220 V rated value         300 A           - at 440 V rated value         300 A           - at 220 V rated value         300 A           - at 220 V rated value         300 A           - at 230 V rated value         300 A           - at 440 V rated value         300 A           - at 400 V rated value         160 KW           - at 600 V rated value         160 KW           - at 600 V rated value         120 KW           - at 600 V rated value <td>— at 440 V rated value</td> <td>0.18 A</td>	— at 440 V rated value	0.18 A
		0.125 A
	<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>	
	— at 24 V rated value	300 A
- at 220 V rated value       2.5 Å         - at 440 V rated value       0.65 Å         - at 600 V rated value       0.37 Å         - at 600 V rated value       300 Å         - at 24 V rated value       300 Å         - at 60 V rated value       300 Å         - at 10 V rated value       300 Å         - at 110 V rated value       300 Å         - at 220 V rated value       300 Å         - at 240 V rated value       300 Å         - at 200 V rated value       0.75 Å         - at 200 V rated value       90 KW         - at 200 V rated value       90 KW         - at 200 V rated value       200 kW         - at 600 V rated value       200 kW         - at 200 V rated value       100 KW         - at 200 V rated value       90 kW         - at 200 V rated value       200 kW         - at 600 V rated value       200 kW <td>— at 60 V rated value</td> <td></td>	— at 60 V rated value	
- at 440 V rated value       0.65 A         - at 600 V rated value       0.37 A         - at 600 V rated value       300 A         - at 24 V rated value       300 A         - at 60 V rated value       300 A         - at 100 V rated value       300 A         - at 220 V rated value       300 A         - at 200 V rated value       300 A         - at 400 V rated value       300 A         - at 400 V rated value       00 A         - at 230 V rated value       00 KW         - at 300 V rated value       200 kW         - at 600 V rated value       200 kW         - at 600 V rated value       200 kW         - at 230 V rated value       132 kW         - at 230 V rated value       90 kW         - at 600 V rated value       200 kW         - at 600 V rated value       200 kW         - at 600 V rated value       200 kW         - at 400 V rated value       200 kW         - at 600 V rated value       200 kW         - at 600 V rated value       200 kW         - at 600 V rated value       160 kW	— at 110 V rated value	300 A
	— at 220 V rated value	2.5 A
• with 3 current paths in series at DC-3 at DC-5         900 A           - at 24 V rated value         300 A           - at 60 V rated value         300 A           - at 110 V rated value         300 A           - at 220 V rated value         300 A           - at 440 V rated value         1.4 A           - at 600 V rated value         0.75 A           - at 230 V rated value         90 kW           - at 230 V rated value         90 kW           - at 230 V rated value         160 kW           - at 230 V rated value         200 kW           - at 690 V rated value         200 kW           - at 690 V rated value         200 kW           - at 690 V rated value         200 kW           - at 230 V rated value         90 kW           - at 230 V rated value         200 kW           - at 690 V rated value         160 kW           - at 690 V rated value         132 kW           - at 690 V rated	— at 440 V rated value	0.65 A
- at 24 V rated value       300 A         - at 60 V rated value       300 A         - at 10 V rated value       300 A         - at 220 V rated value       300 A         - at 220 V rated value       00 A         - at 440 V rated value       0.75 A         operating power       -         • at AC-3       -         - at 230 V rated value       90 kW         - at 200 V rated value       160 kW         - at 200 V rated value       200 kW         - at 400 V rated value       200 kW         - at 600 V rated value       200 kW         - at 200 V rated value       200 kW         - at 600 V rated value       200 kW         - at 600 V rated value       200 kW         - at 1000 V rated value       250 kW         - at 400 V rated value       100 kW         - at 400 V rated value       250 kW         - at 400 V rated value       250 kW         - at 400 V rated value       250 kW         - at 400 V rated value       12 kW         e at 400 V rated value       12 kW         e at 400 V rated value       12 kW         e at 400 V rated value       11 kW         e at 600 V rated value       112 kW	— at 600 V rated value	0.37 A
- at 60 V rated value       300 A         - at 110 V rated value       300 A         - at 220 V rated value       300 A         - at 220 V rated value       300 A         - at 400 V rated value       1.4 A         - at 600 V rated value       0.75 A         operating power       -         - at 230 V rated value       90 kW         - at 230 V rated value       90 kW         - at 400 V rated value       200 kW         - at 500 V rated value       200 kW         - at 600 V rated value       200 kW         - at 600 V rated value       200 kW         - at 300 V rated value       200 kW         - at 300 V rated value       200 kW         - at 1000 V rated value       132 kW         - at 200 V rated value       200 kW         - at 400 V rated value       200 kW         - at 400 V rated value       200 kW         - at 400 V rated value       250 kW         - at 400 V rated value       250 kW         - at 600 V rated value       250 kW         - at 600 V rated value       12 kW         e at 600 V rated value       112 kW         operating apparent power at AC-6a       110 000 kVA	<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul>	
- at 110 V rated value       300 A         - at 220 V rated value       300 A         - at 440 V rated value       1.4 A         - at 600 V rated value       0.75 A         operating power       -         - at 230 V rated value       90 kW         - at 230 V rated value       90 kW         - at 230 V rated value       160 kW         - at 300 V rated value       200 kW         - at 300 V rated value       106 kW         - at 300 V rated value       200 kW         - at 690 V rated value       132 kW         - at 400 V rated value       71 kW         - at 690 V rated value       112 kW <td>— at 24 V rated value</td> <td>300 A</td>	— at 24 V rated value	300 A
- at 220 V rated value       300 A         - at 440 V rated value       1.4 A         - at 600 V rated value       0.75 A         operating power       -         • at AC-3       90 kW         - at 230 V rated value       90 kW         - at 400 V rated value       160 kW         - at 500 V rated value       200 kW         - at 690 V rated value       200 kW         - at 690 V rated value       250 kW         - at 300 V rated value       250 kW         - at 300 V rated value       132 kW         - at 300 V rated value       90 kW         - at 300 V rated value       200 kW         - at 300 V rated value       90 kW         - at 300 V rated value       160 kW         - at 300 V rated value       200 kW         - at 690 V rated value       200 kW         - at 690 V rated value       200 kW         - at 1000 V rated value       200 kW         - at 1000 V rated value       132 kW         operating power for approx. 20000 operating cycles at AC-4       132 kW         • at 400 V rated value       71 kW         • at 400 V rated value       112 kW         operating apparent power at AC-6a       110 000 kVA	— at 60 V rated value	300 A
- at 440 V rated value       1.4 A         - at 600 V rated value       0.75 A         operating power       -         • at AC-3       90 kW         - at 230 V rated value       90 kW         - at 400 V rated value       200 kW         - at 600 V rated value       200 kW         - at 1000 V rated value       250 kW         - at 230 V rated value       90 kW         - at 230 V rated value       90 kW         - at 230 V rated value       90 kW         - at 400 V rated value       90 kW         - at 400 V rated value       200 kW         - at 400 V rated value       200 kW         - at 690 V rated value       200 kW         - at 690 V rated value       200 kW         - at 1000 V rated value       132 kW         operating power for approx. 200000 operating cycles at AC-4       71 kW         • at 400 V rated value       71 kW         • at 600 V rated value       71 kW         • at 600 V rated value       100 to VKA	— at 110 V rated value	300 A
at 600 V rated value         0.75 A           operating power         -           - at 230 V rated value         90 kW           - at 230 V rated value         90 kW           - at 400 V rated value         160 kW           - at 500 V rated value         200 kW           - at 690 V rated value         200 kW           - at 1000 V rated value         132 kW           - at 230 V rated value         90 kW           - at 600 V rated value         200 kW           - at 1000 V rated value         132 kW           operating power for approx. 20000 operating cycles at AC-64         132 kW           - at 400 V rated value         71 kW           - at 600 V rated value         71 kW           - at 600 V rated value         100 tot kVA	— at 220 V rated value	300 A
operating power• at AC-3- at 230 V rated value90 kW- at 400 V rated value160 kW- at 500 V rated value200 kW- at 690 V rated value250 kW- at 1000 V rated value132 kW• at AC-3e- at 230 V rated value90 kW- at 230 V rated value90 kW- at 230 V rated value90 kW- at 400 V rated value90 kW- at 690 V rated value200 kW- at 690 V rated value200 kW- at 1000 V rated value200 kW- at 690 V rated value250 kW- at 1000 V rated value132 kWoperating power for approx. 200000 operating cycles at AC-4• at 400 V rated value112 kWoperating apparent power at AC-6a• up to 230 V for current peak value n=20 rated value110 000 kVA	— at 440 V rated value	1.4 A
• at AC-390 kW- at 230 V rated value90 kW- at 400 V rated value160 kW- at 500 V rated value200 kW- at 690 V rated value250 kW- at 690 V rated value132 kW- at 1000 V rated value90 kW- at 230 V rated value90 kW- at 230 V rated value90 kW- at 400 V rated value160 kW- at 690 V rated value200 kW- at 690 V rated value200 kW- at 690 V rated value250 kW- at 690 V rated value250 kW- at 690 V rated value250 kW- at 690 V rated value132 kWoperating power for approx. 20000 operating cycles at AC-471 kW• at 400 V rated value71 kW• at 690 V rated value112 kWoperating apparent power at AC-6a110 000 kVA• up to 230 V for current peak value n=20 rated value110 000 kVA	— at 600 V rated value	0.75 A
- at 230 V rated value       90 kW         - at 400 V rated value       160 kW         - at 500 V rated value       200 kW         - at 690 V rated value       250 kW         - at 1000 V rated value       132 kW         - at 230 V rated value       90 kW         - at 230 V rated value       90 kW         - at 230 V rated value       90 kW         - at 400 V rated value       90 kW         - at 400 V rated value       160 kW         - at 690 V rated value       200 kW         - at 690 V rated value       200 kW         - at 690 V rated value       200 kW         - at 690 V rated value       132 kW         - at 690 V rated value       132 kW         - at 400 V rated value       71 kW         - at 400 V rated value       71 kW         - at 690 V rated value       112 kW         - at 690 V rated value       110 000 kVA	operating power	
- at 400 V rated value       160 kW         - at 500 V rated value       200 kW         - at 690 V rated value       250 kW         - at 1000 V rated value       132 kW         - at 230 V rated value       90 kW         - at 230 V rated value       90 kW         - at 400 V rated value       160 kW         - at 230 V rated value       200 kW         - at 690 V rated value       200 kW         - at 690 V rated value       200 kW         - at 690 V rated value       250 kW         - at 690 V rated value       250 kW         - at 690 V rated value       250 kW         - at 690 V rated value       132 kW         - at 690 V rated value       71 kW         - at 690 V rated value       112 kW         - at 690 V rated value       110 000 kVAA	• at AC-3	
- at 500 V rated value       200 kW         - at 690 V rated value       250 kW         - at 1000 V rated value       132 kW         • at AC-3e       -         - at 230 V rated value       90 kW         - at 230 V rated value       90 kW         - at 400 V rated value       160 kW         - at 500 V rated value       200 kW         - at 690 V rated value       200 kW         - at 690 V rated value       200 kW         - at 690 V rated value       250 kW         - at 690 V rated value       250 kW         - at 1000 V rated value       132 kW         operating power for approx. 200000 operating cycles at AC-4       71 kW         • at 400 V rated value       71 kW         • at 690 V rated value       112 kW         operating apparent power at AC-6a       110 000 kVA         • up to 230 V for current peak value n=20 rated value       110 000 kVA	— at 230 V rated value	90 kW
- at 690 V rated value       250 kW         - at 1000 V rated value       132 kW         • at AC-3e       -         - at 230 V rated value       90 kW         - at 400 V rated value       160 kW         - at 500 V rated value       200 kW         - at 690 V rated value       200 kW         - at 690 V rated value       200 kW         - at 690 V rated value       250 kW         - at 1000 V rated value       250 kW         - at 1000 V rated value       132 kW         - at 1000 V rated value       132 kW         - at 690 V rated value       132 kW         - at 690 V rated value       112 kW	— at 400 V rated value	160 kW
- at 1000 V rated value       132 kW         • at AC-3e       -         - at 230 V rated value       90 kW         - at 400 V rated value       160 kW         - at 500 V rated value       200 kW         - at 690 V rated value       200 kW         - at 690 V rated value       250 kW         - at 1000 V rated value       132 kW         • at 400 V rated value       112 kW         • at 690 V rated value       112 kW         • up to 230 V for current peak value n=20 rated value       110 000 kVA	— at 500 V rated value	200 kW
• at AC-3e90 kW- at 230 V rated value90 kW- at 400 V rated value160 kW- at 500 V rated value200 kW- at 690 V rated value250 kW- at 1000 V rated value132 kWoperating power for approx. 200000 operating cycles at AC-471 kW• at 400 V rated value71 kW• at 690 V rated value112 kW• up to 230 V for current peak value n=20 rated value110 000 kVA	— at 690 V rated value	250 kW
- at 230 V rated value90 kW- at 400 V rated value160 kW- at 500 V rated value200 kW- at 690 V rated value250 kW- at 1000 V rated value132 kWoperating power for approx. 200000 operating cycles at AC-71 kW• at 400 V rated value71 kW• at 690 V rated value112 kWoperating apparent power at AC-6a110 000 kVA• up to 230 V for current peak value n=20 rated value110 000 kVA	— at 1000 V rated value	132 kW
- at 400 V rated value160 kW- at 500 V rated value200 kW- at 690 V rated value250 kW- at 1000 V rated value132 kWoperating power for approx. 200000 operating cycles at AC-71 kW• at 400 V rated value71 kW• at 690 V rated value112 kWoperating apparent power at AC-6a110 000 kVA• up to 230 V for current peak value n=20 rated value110 000 kVA	• at AC-3e	
- at 500 V rated value200 kW- at 690 V rated value250 kW- at 1000 V rated value132 kWoperating power for approx. 200000 operating cycles at AC-71 kW• at 400 V rated value71 kW• at 690 V rated value112 kWoperating apparent power at AC-6a110 000 kVA• up to 230 V for current peak value n=20 rated value110 000 kVA	— at 230 V rated value	90 kW
at 690 V rated value250 kW at 1000 V rated value132 kWoperating power for approx. 200000 operating cycles at AC-V• at 400 V rated value71 kW• at 690 V rated value112 kW• at 690 V rated value112 kWoperating apparent power at AC-6a110 000 kVA	— at 400 V rated value	160 kW
- at 1000 V rated value       132 kW         operating power for approx. 200000 operating cycles at AC-4       -         • at 400 V rated value       71 kW         • at 690 V rated value       112 kW         operating apparent power at AC-6a       -         • up to 230 V for current peak value n=20 rated value       110 000 kVA	— at 500 V rated value	200 kW
operating power for approx. 200000 operating cycles at AC-4          • at 400 V rated value       71 kW         • at 690 V rated value       112 kW         operating apparent power at AC-6a          • up to 230 V for current peak value n=20 rated value       110 000 kVA	— at 690 V rated value	250 kW
4     • at 400 V rated value     71 kW       • at 690 V rated value     112 kW       operating apparent power at AC-6a     110 000 kVA       • up to 230 V for current peak value n=20 rated value     110 000 kVA	— at 1000 V rated value	132 kW
• at 400 V rated value     71 kW       • at 690 V rated value     112 kW       • operating apparent power at AC-6a     110 000 kVA       • up to 230 V for current peak value n=20 rated value     110 000 kVA		
• at 690 V rated value     112 kW       operating apparent power at AC-6a     In 000 kVA       • up to 230 V for current peak value n=20 rated value     110 000 kVA		
operating apparent power at AC-6a       110 000 kVA         • up to 230 V for current peak value n=20 rated value       110 000 kVA		
• up to 230 V for current peak value n=20 rated value 110 000 kVA		112 kW
up to 400 V for current peak value n=20 rated value 200 000 VA		
	• up to 400 V for current peak value n=20 rated value	200 000 VA

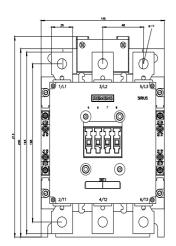
<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	250 000 VA		
<ul> <li>up to 690 V for current peak value n=20 rated value</li> </ul>	330 000 VA		
<ul> <li>up to 1000 V for current peak value n=20 rated value</li> </ul>	160 000 VA		
operating apparent power at AC-6a			
<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	70 000 VA		
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	130 000 VA		
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	160 000 VA		
<ul> <li>up to 690 V for current peak value n=30 rated value</li> </ul>	230 000 VA		
<ul> <li>up to 1000 V for current peak value n=30 rated value</li> </ul>	160 000 VA		
short-time withstand current in cold operating state up to 40 °C			
<ul> <li>limited to 1 s switching at zero current maximum</li> </ul>	5 524 A; Use minimum cross-section acc. to AC-1 rated value		
<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	4 579 A; Use minimum cross-section acc. to AC-1 rated value		
<ul> <li>limited to 10 s switching at zero current maximum</li> </ul>	3 153 A; Use minimum cross-section acc. to AC-1 rated value		
<ul> <li>limited to 30 s switching at zero current maximum</li> </ul>	1 883 A; Use minimum cross-section acc. to AC-1 rated value		
<ul> <li>limited to 60 s switching at zero current maximum</li> </ul>	1 445 A; Use minimum cross-section acc. to AC-1 rated value		
no-load switching frequency			
• at AC	2 000 1/h		
• at DC	2 000 1/h		
operating frequency			
• at AC-1 maximum	750 1/h		
• at AC-2 maximum	250 1/h		
• at AC-3 maximum	500 1/h		
• at AC-3e maximum	500 1/h		
• at AC-4 maximum	130 1/h		
Control circuit/ Control			
type of voltage of the control supply voltage	AC/DC		
control supply voltage at AC			
• at 50 Hz rated value	220 240 V		
• at 60 Hz rated value	220 240 V		
control supply voltage at DC rated value	220 240 V		
operating range factor control supply voltage rated value of			
magnet coil at DC			
initial value	0.8		
• full-scale value	1.1		
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		
design of the surge suppressor	with varistor		
	With Valiston		
apparent pick-up power • at minimum rated control supply voltage at AC			
	400.\/A		
— at 50 Hz — at 60 Hz	490 VA 490 VA		
• at maximum rated control supply voltage at AC	500 \/A		
- at 60 Hz	590 VA		
— at 50 Hz	590 VA		
apparent pick-up power of magnet coil at AC	500 \/A		
• at 50 Hz	590 VA		
• at 60 Hz	590 VA		
inductive power factor with closing power of the coil	0.0		
• at 50 Hz	0.9		
• at 60 Hz	0.9		
apparent holding power	C 4 ) (A		
at minimum rated control supply voltage at DC	6.1 VA		
at maximum rated control supply voltage at DC	7.4 VA		
apparent holding power			
at minimum rated control supply voltage at AC			
— at 50 Hz	5.6 VA		
— at 60 Hz	5.6 VA		
at maximum rated control supply voltage at AC			
— at 50 Hz	6.7 VA		

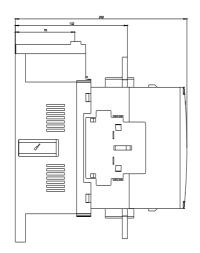
at 60 Hz	67\/		
— at 60 Hz	6.7 VA		
inductive power factor with the holding power of the coil			
• at 50 Hz	0.9		
• at 60 Hz	0.9		
closing power of magnet coil at DC	650 W		
holding power of magnet coil at DC	7.4 W		
closing delay			
• at AC	30 95 ms		
● at DC	30 95 ms		
opening delay			
• at AC	40 80 ms		
• at DC	40 80 ms		
arcing time	10 15 ms		
control version of the switch operating mechanism	Standard A1 - A2		
Auxiliary circuit			
number of NC contacts for auxiliary contacts instantaneous	2		
contact			
number of NO contacts for auxiliary contacts instantaneous contact	2		
operational current at AC-12 maximum	10 A		
operational current at AC-15			
• at 230 V rated value	6 A		
<ul> <li>at 400 V rated value</li> </ul>	3 A		
• at 500 V rated value	2 A		
• at 690 V rated value	1 A		
operational current at DC-12			
<ul> <li>at 24 V rated value</li> </ul>	10 A		
<ul> <li>at 48 V rated value</li> </ul>	6 A		
<ul> <li>at 60 V rated value</li> </ul>	6 A		
<ul> <li>at 110 V rated value</li> </ul>	3 A		
• at 125 V rated value	2 A		
<ul> <li>at 220 V rated value</li> </ul>	1 A		
• at 600 V rated value	0.15 A		
operational current at DC-13			
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			
	302 Δ		
at 480 V rated value	302 A		
at 600 V rated value	289 A		
yielded mechanical performance [hp]			
for 3-phase AC motor     at 200/208 V rated value	100 hp		
- at 200/208 V rated value	100 hp		
- at 220/230 V rated value	125 hp		
- at 460/480 V rated value	250 hp		
- at 575/600 V rated value	300 hp		
contact rating of auxiliary contacts according to UL	A600 / Q600		
Short-circuit protection			
design of the fuse link			
<ul> <li>for short-circuit protection of the main circuit</li> </ul>			
<ul> <li>— with type of coordination 1 required</li> </ul>	gG: 500 A (690 V, 100 kA)		
<ul> <li>— with type of assignment 2 required</li> </ul>	gG: 400 A (690 V, 100 kA), aM: 315 A (690 V, 50 kA), BS88: 400 A (415 V, 50		
· for abort aircuit protection of the availant switch required	kA)		
for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)		
Installation/ mounting/ dimensions			

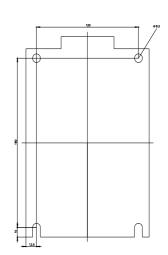
mounting position	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back			
fastening method	screw fixing			
height	210 mm			
width	145 mm			
depth	202 mm			
required spacing				
with side-by-side mounting				
— forwards	20 mm			
— upwards	20 mm 10 mm			
— downwards	10 mm			
— at the side	0 mm			
for grounded parts				
— forwards	20 mm			
— upwards	10 mm			
— at the side	10 mm			
— downwards	10 mm			
for live parts				
— forwards	20 mm			
— upwards	10 mm			
— downwards	10 mm			
— at the side	10 mm			
Connections/ Terminals				
type of electrical connection				
for main current circuit	Connection bar			
for auxiliary and control circuit	screw-type terminals			
at contactor for auxiliary contacts	Screw-type terminals			
of magnet coil     width of connection bar	Screw-type terminals 25 mm			
thickness of connection bar	6 mm			
diameter of holes	11 mm			
number of holes	1			
type of connectable conductor cross-sections				
for AWG cables for main contacts	2/0 500 kcmil			
connectable conductor cross-section for main contacts	2/0 300 Komi			
stranded	70 240 mm²			
connectable conductor cross-section for auxiliary contacts				
solid or stranded	0.5 4 mm²			
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm <sup>2</sup>			
type of connectable conductor cross-sections				
for auxiliary contacts				
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)			
— solid or stranded	2x (0,5 1,5 mm <sup>2</sup> ), 2x (0,75 2,5 mm <sup>2</sup> ), max. 2x (0,75 4 mm <sup>2</sup> )			
<ul> <li>— finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> )			
<ul> <li>for AWG cables for auxiliary contacts</li> </ul>	2x (20 16), 2x (18 14), 1x 12			
AWG number as coded connectable conductor cross				
section				
<ul> <li>for auxiliary contacts</li> </ul>	18 14			
Safety related data				
product function				
<ul> <li>mirror contact according to IEC 60947-4-1</li> </ul>	Yes			
<ul> <li>positively driven operation according to IEC 60947-5-1</li> </ul>	No			
<ul> <li>suitable for safety function</li> </ul>	Yes			
suitability for use safety-related switching OFF	Yes			
service life maximum	20 a			
test wear-related service life necessary	Yes			
proportion of dangerous failures				
<ul> <li>with low demand rate according to SN 31920</li> </ul>	40 %			
<ul> <li>with high demand rate according to SN 31920</li> </ul>	73 %			
B10 value with high demand rate according to SN 31920	1 000 000			
failure rate [FIT] with low demand rate according to SN	100 FIT			

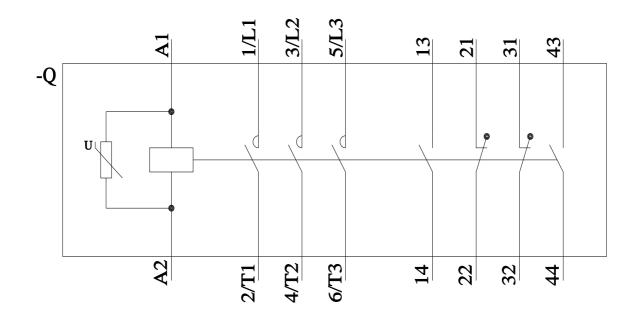
31920						
ISO 13849						
device type according to ISO 13849-1		3				
overdimensioning acc	ording to ISO 13849-2 n	ecessary	Yes			
IEC 61508						
safety device type acc	ording to IEC 61508-2		Туре	A		
Electrical Safety						
	the front according to I			IP20 with box terminal/co		
-	e front according to IEC	C 60529	finger	-safe, for vertical contact	from the front with box ter	minal/cover
Approvals Certificates		_		_		
General Product Appr	UK CA			Confirmation	(ال س	KC
General Product Approval	EMV	Functional Saft	tey	Test Certificates		
EHC	RCM	Type Examination tificate	<u>n Cer-</u>	Type Test Certific- ates/Test Report	Special Test Certific- ate	<u>Miscellaneous</u>
Marine / Shipping						other
ABS		Lloyd's Register uis		PRS	RMRS R	<u>Miscellaneous</u>
other				Railway	Environment	
Confirmation	<u>Miscellaneous</u>	<u>Confirmation</u>		Special Test Certific- ate	EPD	Siemens EcoTech
Environment						
Environmental Con- firmations						

Further information Information on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875 Information- and Downloadcenter (Catalogs, Brochures,...) https://www.siemens.com/ic10 Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1066-6AP36 Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1066-6AP36 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT1066-6AF Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) P<u>36&lang=en</u> http://www.automation.siemens.com/bilddb/cax Characteristic: Tripping characteristics, I2t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RT1066-6AP36/char Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1066-6AP36&objecttype=14&gridview=view1









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9/25/2024