# **SIEMENS**

Data sheet 3RT2036-1AL20



power contactor, AC-3e/AC-3, 51 A, 22 kW / 400 V, 3-pole, 230 V AC, 50/60 Hz, auxiliary contacts: 1 NO + 1 NC, screw terminal, size: S2  $\,$ 

product designation 98TZ  Size of contactor \$2  Size of contactor \$2  Product extension	product brand name	SIRIUS
product type designation  Sincer I technical data  Stace of contactor  Size of contactor  • function module for communication • function module for communication • function module for rated value of the current • at AC in hot operating state per pole • at AC in hot operating state per pole • without load current share typical • of main circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit value • of auxilia	•	Power contactor
Size of contactor product extension • function module for communication • auxiliary switch • auxiliary switch • at AC in hot operating state • at AC in hot operating state per pole • without load current share typical • of main circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit vith degree of pollution 3 rated value • of auxiliary circuit vith degree of pollution 3 rated value • of auxiliary circuit rated value • of auxiliary circuit rated value • of auxiliary circuit rated value • of auxiliary switch block typical • at AC  • of contactor with sine pulse • at AC • of contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliar		3RT2
product extension  • function module for communication • function module for communication • auxiliary switch  power loss [W] for rated value of the current • at AC in hot operating state • at AC in hot operating state per pole • at AC in hot operating state per pole • at AC in hot operating state per pole • of main circuit with degree of pollution 3 rated value • of main circuit with degree of pollution 3 rated value • of main circuit rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit value • at AC  maximum permissible voltage for protective separation between coll and main condacts according to EN 69947-1  **shock resistance at rectangular impulse • at AC  **shock resistance with sine pulse • at AC  **at AC  **shock resistance with sine pulse • at AC  **of contactor with added electronically optimized auxilary switch block typical • of the contactor with added auxiliary switch block typical  **of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical  **of the contactor with added auxiliary switch block typical  **of the contactor with added auxiliary switch block typical  **of the contactor with added auxiliary switch block typical  **of the contactor with added auxiliary switch block typical  **of the contactor with added auxiliary switch block typical  **of the contactor with added auxiliary switch block typical  **of the contactor with added auxiliary switch block typical  **of the contactor with added auxiliary switch block typical  **of the contactor with added auxiliary switch block typical  **of the contactor with added auxiliary switch block typical  **of the contactor with added auxiliary switch block typical  **of the contactor with added auxiliary switch block typical  **of the contactor w	General technical data	
• function module for communication • auxiliary switch • auxiliary switch • at AC in hot operating state • at AC in hot operating state per pole • at AC in hot operating state per pole • without load current share typical • of main circuit with degree of pollution 3 rated value • of main circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit rated value • at AC	size of contactor	S2
• auxillary switch  • auxillary switch  • at AC in hot operating state per pole • at AC in hot operating state per pole • without load current share typical • of main circuit with degree of pollution 3 rated value • of main circuit with degree of pollution 3 rated value • of main circuit with degree of pollution 3 rated value • of main circuit rated value • of auxiliary switch block typical • at AC  11.8g / 5 ms, 7.4g / 10 ms  **Shock resistance at rectangular impulse • at AC  11.8g / 5 ms, 7.4g / 10 ms  **Bhock resistance with sine pulse • at AC  11.8g / 5 ms, 7.4g / 10 ms  **Bhock resistance with sine pulse • at AC  10.000 000 • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typ	product extension	
power loss [W] for rated value of the current  at AC in hot operating state prope	• function module for communication	No
at AC in hot operating state per pole at AC in hot operating state per pole without load current share typical  of main circuit with degree of pollution 3 rated value of auxillary circuit with degree of pollution 3 rated value of auxillary circuit with degree of pollution 3 rated value of auxillary circuit with degree of pollution 3 rated value of main circuit rated value of main circuit rated value of auxillary circuit rated value of the contactor with sine pulse of the contactor with added auxillary south block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block ty	auxiliary switch	Yes
at AC in hot operating state per pole without load current share typical  without load current share typical  of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value  of main circuit rated value of main circuit rated value of auxiliary circuit rated value of the contactor with sine pulse of the contactor typical of the contactor vith added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch	power loss [W] for rated value of the current	
insulation voltage  of main circuit with degree of pollution 3 rated value  of auxiliary circuit with degree of pollution 3 rated value  of auxiliary circuit rated value  of main circuit rated value  of auxiliary circuit rated value  10 days for protective separation between coil and main contacts according to EN 60947-1  shock resistance at rectangular impulse  ot AC  18.5g / 5 ms, 7.4g / 10 ms  shock resistance with sine pulse  ot AC  18.5g / 5 ms, 11.8g / 10 ms  mechanical service life (operating cycles)  of contactor typical  of the contactor with added electronically optimized auxiliary switch block typical  of the contactor with added auxilia	<ul> <li>at AC in hot operating state</li> </ul>	12 W
insulation voltage of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of main circuit rated value of main circuit rated value of main circuit rated value of auxiliary circuit rated value of a kV  auxiliary circuit rated value of a kV  auxiliary circuit rated value of a kV  400 V  11.8g / 5 ms, 7.4g / 10 ms  shock resistance at rectangular impulse of at AC 18.5g / 5 ms, 11.6g / 10 ms  mechanical service life (operating cycles) of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the co	<ul> <li>at AC in hot operating state per pole</li> </ul>	4 W
of main circuit with degree of pollution 3 rated value     of auxiliary circuit with degree of pollution 3 rated value     surge voltage resistance     of main circuit rated value     of auxiliary circuit rated value     of kV  maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1  shock resistance at rectangular impulse     ot at AC     11.8g / 5 ms, 7.4g / 10 ms  shock resistance with sine pulse     of contactor with sine pulse     of the contactor vipical     of the contactor with added electronically optimized auxiliary switch block typical     of the contactor with added auxiliary switch block typical	<ul> <li>without load current share typical</li> </ul>	6.5 W
of auxiliary circuit with degree of pollution 3 rated value  surge voltage resistance     of main circuit rated value     of auxiliary circuit rated value  maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1  shock resistance at rectangular impulse     of at AC	insulation voltage	
surge voltage resistance  of main circuit rated value of auxiliary circuit rated value of kV  maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1  shock resistance at rectangular impulse of at AC 11.8g / 5 ms, 7.4g / 10 ms  shock resistance with sine pulse of at AC 18.5g / 5 ms, 11.6g / 10 ms  mechanical service life (operating cycles) of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added aux	<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	690 V
of main circuit rated value     of auxiliary circuit rated value     of auxiliary circuit rated value     of auxiliary circuit rated value     of kV  maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1  shock resistance at rectangular impulse     ot AC     11.8g / 5 ms, 7.4g / 10 ms  shock resistance with sine pulse     ot AC     18.5g / 5 ms, 11.6g / 10 ms  mechanical service life (operating cycles)     of contactor typical     of the contactor with added electronically optimized auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contact	<ul> <li>of auxiliary circuit with degree of pollution 3 rated value</li> </ul>	690 V
of auxiliary circuit rated value     maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1  shock resistance at rectangular impulse	surge voltage resistance	
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1  shock resistance at rectangular impulse  • at AC  11.8g / 5 ms, 7.4g / 10 ms  shock resistance with sine pulse  • at AC  18.5g / 5 ms, 11.6g / 10 ms  mechanical service life (operating cycles)  • of contactor typical  • of the contactor with added electronically optimized auxiliary switch block typical  • of the contactor with added auxiliary switch block typical  • of the contactor	of main circuit rated value	6 kV
shock resistance at rectangular impulse	<ul> <li>of auxiliary circuit rated value</li> </ul>	6 kV
at AC  shock resistance with sine pulse at AC  at		400 V
shock resistance with sine pulse	shock resistance at rectangular impulse	
at AC  mechanical service life (operating cycles)  of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical  of the contactor with added auxiliary switch block typical  reference code according to IEC 81346-2 Q Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum ambient temperature of during operation of during storage  relative humidity minimum  10 %  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit  10 000 000  10 000 000  10 000 000  10 000 00	• at AC	11.8g / 5 ms, 7.4g / 10 ms
mechanical service life (operating cycles)  • of contactor typical  • of the contactor with added electronically optimized auxiliary switch block typical  • of the contactor with added auxiliary switch block typical  • of the contactor with added auxiliary switch block typical  • of the contactor with added auxiliary switch block typical  reference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation  • during storage  -55 +80 °C  relative humidity minimum  10 %  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit  Main circuit	shock resistance with sine pulse	
of contactor typical     of the contactor with added electronically optimized auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     10 000 000  reference code according to IEC 81346-2 Q Substance Prohibitance (Date)     10/01/2014  Ambient conditions installation altitude at height above sea level maximum     2 000 m  ambient temperature     oduring operation     -25 +60 °C     oduring storage     relative humidity minimum     10 %  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit  10 000 000  10 0	• at AC	18.5g / 5 ms, 11.6g / 10 ms
of the contactor with added electronically optimized auxiliary switch block typical     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     reference code according to IEC 81346-2  Substance Prohibitance (Date)  Ambient conditions  Installation altitude at height above sea level maximum  ambient temperature     oduring operation     during storage  relative humidity minimum  10 %  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit  5 000 000  10 000  00  00  00  00  00  00	mechanical service life (operating cycles)	
auxiliary switch block typical  of the contactor with added auxiliary switch block typical  reference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  10/01/2014  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature of during operation of during storage  relative humidity minimum  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit	<ul> <li>of contactor typical</li> </ul>	10 000 000
reference code according to IEC 81346-2  Substance Prohibitance (Date)  10/01/2014  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage  relative humidity minimum  10 %  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit		5 000 000
Substance Prohibitance (Date)  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage  relative humidity minimum  10 %  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit	<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000
installation altitude at height above sea level maximum  ambient temperature  • during operation • during storage  relative humidity minimum  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit  2 000 m  -25 +60 °C  -25 +80 °C  10 %  95 %	reference code according to IEC 81346-2	Q
installation altitude at height above sea level maximum  ambient temperature  • during operation  • during storage  relative humidity minimum  10 %  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit	Substance Prohibitance (Date)	10/01/2014
ambient temperature  • during operation • during storage  -25 +60 °C  • during storage  -55 +80 °C  relative humidity minimum  10 %  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit	Ambient conditions	
<ul> <li>during operation</li> <li>during storage</li> <li>telative humidity minimum</li> <li>relative humidity at 55 °C according to IEC 60068-2-30 maximum</li> <li>Main circuit</li> </ul>	installation altitude at height above sea level maximum	2 000 m
● during storage  relative humidity minimum  10 %  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit	ambient temperature	
relative humidity minimum  relative humidity at 55 °C according to IEC 60068-2-30 95 % maximum  Main circuit	<ul> <li>during operation</li> </ul>	-25 +60 °C
relative humidity at 55 °C according to IEC 60068-2-30 95 % maximum  Main circuit	during storage	-55 +80 °C
maximum  Main circuit	relative humidity minimum	10 %
		95 %
number of poles for main current circuit 3	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>	690 V
at AC-3e rated value maximum	690 V
operational current	
<ul> <li>at AC-1 at 400 V at ambient temperature 40 °C rated</li> </ul>	70 A
value	
• at AC-1	
<ul> <li>up to 690 V at ambient temperature 40 °C rated value</li> </ul>	70 A
— up to 690 V at ambient temperature 60 °C rated	60 A
value	
• at AC-3	
— at 400 V rated value	51 A
— at 500 V rated value	51 A
— at 690 V rated value	24 A
• at AC-3e	
— at 400 V rated value	51 A
— at 500 V rated value	51 A
— at 690 V rated value	24 A
• at AC-4 at 400 V rated value	41 A
• at AC-5a up to 690 V rated value	61.6 A
• at AC-5b up to 400 V rated value	41.5 A
• at AC-6a	
— up to 230 V for current peak value n=20 rated value	43.2 A
— up to 400 V for current peak value n=20 rated value	43.2 A
— up to 500 V for current peak value n=20 rated value	43.2 A
— up to 690 V for current peak value n=20 rated value	24 A
• at AC-6a	
— up to 230 V for current peak value n=30 rated value	28.8 A
— up to 400 V for current peak value n=30 rated value	28.8 A
— up to 500 V for current peak value n=30 rated value	28.8 A
— up to 690 V for current peak value n=30 rated value	24 A
minimum cross-section in main circuit at maximum AC-1 rated value	25 mm²
operational current for approx. 200000 operating cycles at	
AC-4	24.0
• at 400 V rated value	24 A
at 690 V rated value	20 A
operational current	
at 1 current path at DC-1  at 0.4 Verta during	55.4
— at 24 V rated value	55 A
— at 60 V rated value	23 A
— at 110 V rated value	4.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.4 A
— at 600 V rated value	0.25 A
with 2 current paths in series at DC-1  at 24 Verted value.	EE A
— at 24 V rated value	55 A
— at 60 V rated value	45 A
— at 110 V rated value	45 A
— at 220 V rated value	5 A
— at 440 V rated value	1 A
— at 600 V rated value	0.8 A
with 3 current paths in series at DC-1	
— at 24 V rated value	55 A
— at 60 V rated value	55 A
— at 110 V rated value	55 A
— at 220 V rated value	45 A
— at 440 V rated value	2.9 A
— at 600 V rated value	1.4 A
• at 1 current path at DC-3 at DC-5	

	— at 24 V rated value	35 A
	— at 60 V rated value	6 A
	— at 220 V rated value	1 A
- with 2 current paths in series at DC-3 at DC-5  - alt 24 V rated value - alt 10 V rated value - at 25 A - at 210 V rated value - at 20 V rated value - at 400 V rated value - at 600 V rated value - at 600 V rated value - at 600 V rated value - with 3 current paths in series at DC-3 at DC-5 - at 24 V rated value - at 100 V rated value - at 20 V rated value - at 100 V rated value - at 100 V rated value - at 25 A - at 20 V rated value - at 500	— at 440 V rated value	0.1 A
	— at 600 V rated value	0.06 A
	<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>	
	— at 24 V rated value	55 A
	— at 60 V rated value	45 A
= at 240 V riset value	— at 110 V rated value	25 A
		5 A
- with 3 current paths in series at DC-3 at DC-5  - at 24 V rated value - at 10 V rated value - at 110 V rated value - at 25 A - at 60 V rated value - at 440 V rated value - at 440 V rated value - at 600 V		
		0.10 A
		EE A
al 110 V rated value at 220 V rated value at 800 V rated value 20 rated value at 900 V for current peak value n-20 rated value 20 pas V for current		
O.35 A   Operating power	— at 220 V rated value	25 A
Operating power   at AC-2 at 400 V rated value   22 kW   at AC-3   at 400 V rated value   15 kW   at AC-3   at 500 V rated value   22 kW   at 400 V rated value   22 kW   at 500 V rated value   23 kW   at 500 V rated value   24 kW   at 500 V rated value   25 kW   at 500 V rated	— at 440 V rated value	0.6 A
• at AC-2 at 400 V rated value • at AC-3 — at 230 V rated value — at 400 V rated value — at 600 V for current peak value n=20 rated value • up to 200 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 500 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current 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 valu	— at 600 V rated value	0.35 A
- at 230 V rated value	operating power	
at 230 V rated value at 400 V rated value 22 kW 22 kW 24 KO V rated value 25 kW 25	• at AC-2 at 400 V rated value	22 kW
at 400 V rated value	• at AC-3	
at 500 V rated value at 690 V rated value at 690 V rated value at 690 V rated value at 600 V rated value at 500 V rated value at 690 V roc current peak value n=20 rated value at 690 V for current peak value n=20 rated value at 690 V for current peak value n=20 rated value at 690 V for current peak value n=20 rated value at 690 V for current peak value n=30 rated value at 690	— at 230 V rated value	15 kW
at AC-3e     — at 400 V rated value     — at 500 V rated value     — at 690 V rated value     22 kW  poperating power for approx. 200000 operating cycles at AC-4      at 400 V rated value     at 690 V rated value     at 690 V rated value     at 690 V rated value     operating apparent power at AC-6a     up to 230 V for current peak value n=20 rated value     up to 500 V for current peak value n=20 rated value     up to 500 V for current peak value n=20 rated value     up to 590 V for current peak value n=30 rated value     up to 400 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 500 V for current peak value n=30 rated value     up to 500 V for current peak value n=30 rated value     value to 500 V for current peak value n=30 rated value     value to 500 V for current peak value n=30 rated value     value to 500 V for current peak value n=30 rated value     value 500 V for current peak value n=30 rated value     value 690 V for current peak value n=30 rated value     value 690 V for current peak value n=30 rated value     value 690 V for current peak value n=30 rated value     value 690 V for current peak value n=30 rated value     value 690 V for current peak value n=30 rated value     value 690 V for current peak value n=30 rated value     value 690 V for current peak value n=30 rated value     value 690 V for current peak value n=30 rated value     value 690 V for current peak value n=30 rated value     value 690 V for current peak value n=30 rated value     value 690 V for current peak value n=30 rated value     value 690 V for current peak value n=30 rated value     value 690 V for current peak value n=30 rated value     value 690 V for current peak value n=30 rated valu	— at 400 V rated value	22 kW
at AC-3e  — at 400 V rated value — at 590 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 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=20 rated value  ***up to 500 V for current peak value n=20 rated value  ***u	— at 500 V rated value	22 kW
at AC-3e — at 400 V rated value — at 590 V rated value — at 690 V rated value  22 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  12.6 kW  at 690 V rated value  15.2 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 230 V for current peak value n=20 rated value  up to 230 V for current peak value n=30 rated value  up to 500 V for current peak value n=30 rated value  up to 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  sup to 500 V for current peak value n=30 rated value  in to 500 V for current peak value n=30 rated value  sup to 500 V for current peak value n=30 rated value  in the 500 V for current peak value n=30 rated value  in the 500 V for current peak value n=30 rated value  in the 500 V for current peak value n=30 rated value  in the 500 V for current peak value n=30 rated value  32.6 kVA  37. Use minimum cross-section acc. to AC-1 rated value  48.8 A; Use minimum cross-section acc. to AC-1 rated value  48.2 A; Use minimum cross-section acc. to AC-1 rated value  29.4 Use minimum cross-section acc. to AC-1 rated value  29.5 kVA  500 I/h  at AC-1 maximum  at AC-3 maximum  at AC-3 maximum  at AC-3 maximum  at AC-4 maximum  500 I/h  at AC-4 maximum  500 I/h  500 I/h  600	— at 690 V rated value	22 kW
- at 400 V rated value		
- at 590 V rated value - at 690 V rated value  operating power for approx. 200000 operating cycles at AC-4  * at 400 V rated value * at 690 V rated value * op to 230 V for current peak value n=20 rated value * op to 400 V for current peak value n=20 rated value * op to 500 V for current peak value n=20 rated value * op to 690 V for current peak value n=20 rated value * op to 690 V for current peak value n=20 rated value * op to 690 V for current peak value n=20 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 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 400 V for current peak value n=30 rated value * op to 400 V for current peak value n=30 rated value * op to 400 V for current peak value n=30 rated value * op to 400 V for current peak value n=30 rated value * op to 400 V for current peak value n=30 rated value * op to 400 V for current peak value n=30 rated value * op to 400 V for current peak value n=30 rated value * op to 400 V for current peak value n=30 rated value * op to 400 V for current peak value n=30 rated value * op to 400 V for current peak value n=30 rated value * op to 400 V for current peak value n=30 rated value * op to 400 V for current peak value n=30 rated value * op to 400 V for current peak value n=30 rated value *		22 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 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 400 V for current peak value n=20 rated value • up to 690 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • 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 • limited to 1 s switching at zero current maximum • limited to 5 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 s		
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 400 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 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 • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value • limited to 1 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 50 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • 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 zer		
* at 400 V rated value     * at 690 V rated value     * at 690 V rated value     * operating apparent power at AC-6a     * up to 230 V for current peak value n=20 rated value     * up to 400 V for current peak value n=20 rated value     * up to 500 V for current peak value n=20 rated value     * up to 690 V for current peak value n=20 rated value     * up to 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 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 500 V for current peak value n=30 rated value     * up to 500 V for current peak value n=30 rated value     * up to 500 V for current peak value n=30 rated value     * up to 500 V for current peak value n=30 rated value     * up to 690 V for current peak value n=30 rated value     * up to 690 V for current peak value n=30 rated value     * up to 690 V for current peak value n=30 rated value     * ilmited to 1 s switching at zero current maximum     * ilmited to 5 s switching at zero current maximum     * ilmited to 5 s switching at zero current maximum     * ilmited to 6 s switching at zero current maximum     * ilmited to 6 s switching at zero current maximum     * ilmited to 6 s switching at zero current maximum     * ilmited to 6 s switching at zero current maximum     * ilmited to 6 s switching at zero current maximum     * ilmited to 6 s switching at zero current maximum     * ilmited to 6 s switching at zero current maximum     * ilmited to 6 s switching at zero current maximum     * ilmited to 6 s switching at zero current maximum     * ilmited to 6 s switching at zero current maximum     * ilmited to 6 s switching at zero current maximum     * ilmited to 6 s switching at zero current maximum     * ilmited to 6 switching at zero current maximum		EL KH
• 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 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 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 • up to 690 V for current peak value n=30 rated value • limited to 1 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 30 s switching at zero current maximum • limited to 60 s switching at zero c		
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 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  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 590 V for current peak value n=30 rated value • up to 590 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  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 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 • 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 • limi	• at 400 V rated value	12.6 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 690 V for current peak value n=20 rated value 28.6 kVA  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 up to 500 V for current peak value n=30 rated value short-time withstand current in cold operating state up to up to 500 V for current peak value n=30 rated value short-time withstand current in cold operating state up to up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to up to 690 V for current maximum short-time withstand current in cold operating state up to up to 690 V for current maximum short-time withstand current in cold operating state up to up to 690 V for current maximum short-time withstand current in cold operating state up to up to 690 V for current maximum short-time withstand current in cold operating state up to up to 690 V for current maximum short-time withstand current in cold operating state up to up to 690 V for current maximum coss-section acc. to AC-1 rated value short-time withstand current in cold operating state up to up to 690 V for current maximum coss-section acc. to AC-1 rated value short-time withstand current in cold operat	• at 690 V rated value	18.2 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 690 V for current peak value n=20 rated value 28.6 kVA  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 up to 500 V for current peak value n=30 rated value short-time withstand current in cold operating state up to up to 500 V for current peak value n=30 rated value short-time withstand current in cold operating state up to up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to up to 690 V for current maximum short-time withstand current in cold operating state up to up to 690 V for current maximum short-time withstand current in cold operating state up to up to 690 V for current maximum short-time withstand current in cold operating state up to up to 690 V for current maximum short-time withstand current in cold operating state up to up to 690 V for current maximum short-time withstand current in cold operating state up to up to 690 V for current maximum coss-section acc. to AC-1 rated value short-time withstand current in cold operating state up to up to 690 V for current maximum coss-section acc. to AC-1 rated value short-time withstand current in cold operat	operating apparent power at AC-6a	
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=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 690 V for current maximum up to 690 V for current m		17.2 kVA
up to 500 V for current peak value n=20 rated value up to 690 V for current peak value n=20 rated value 28.6 kVA  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 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 24.9 kVA  short-time withstand current in cold operating state up to 40 °C  ilmited 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  at AC-2 maximum at AC-1 maximum limited to 600 1/h at AC-2 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  250 1/h  Control circuit/ Control	·	
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         up to 690 V for current peak value n=30 rated value         short-time withstand current in cold operating state up to 40 °C         e limited to 1 s switching at zero current maximum         e limited to 5 s switching at zero current maximum         e limited to 10 s switching at zero current maximum         e limited to 30 s switching at zero current maximum         e limited to 60 s switching at zero current maximum         e limited to	·	
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  • 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 frequency  • at AC  • at AC-1 maximum  • at AC-2 maximum  • at AC-3 maximum  • at AC-3 maximum  • at AC-4 maximum  • at AC-5 to	·	
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 in cold operating state up to 40 °C  ilmited 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 30 s switching at zero current maximum limited to 60 s switching		20.0 KV/K
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 10 s switching at zero current maximum     ilimited to 30 s switching at zero current maximum     ilimited to 30 s switching at zero current maximum     ilimited to 60 s switching at zero current		11.4 kVΔ
• 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 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 frequency  • at AC  • at AC-1 maximum  1 000 1/h  • at AC-2 maximum  • at AC-3 maximum  • at AC-3 maximum  • at AC-4 maximum  • at AC-5 control circuit/ Control		
• 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  • limited to 60 s switching at zero current maximum  • limited to 60 s switching at zero current maximum  olimited to 60 s switching at zero current maximum  no-load switching frequency  • at AC  operating frequency  • at AC-1 maximum  1 000 1/h  • at AC-2 maximum  • at AC-3 maximum  • at AC-3 maximum  • at AC-4 maximum  • at		
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 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 282 A; Use minimum cross-section acc. to AC-1 rated value • limited to 60 s switching at zero current maximum 229 A; Use minimum cross-section acc. to AC-1 rated value  no-load switching frequency • at AC  operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-3 emaximum • at AC-3 emaximum • at AC-4 maximum • at AC-5 to AC-1 rated value  937 A; Use minimum cross-section acc. to AC-1 rated value  282 A; Use minimum cross-section acc. to AC-1 rated value  183 A; Use minimum cross-section acc. to AC-1 rated value  184 AC-1 rated value  185 AC-1 rated value  185 AC-1 rated value  186 A; Use minimum cross-section acc. to AC-1 rated value  186 A; Use minimum cross-section acc. to AC-1 rated value  186 A; Use minimum cross-section acc. to AC-1 rated value  186 A; Use minimum cross-section acc. to AC-1 rated value  186 A; Use minimum cross-section acc. to AC-1 rated value  187 AC-1 rated value  188 AC-1 rated value  189 A	·	
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 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  • 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 10 s switching at zero current maximum  • limited to 60 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 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		ZÖ.Ö KVA
<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 30 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 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 30 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 40 AC-1 rated value</li> <li>li</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 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 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 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 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 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 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 zer</li></ul>		937 A: Use minimum cross-section acc. to AC-1 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>at AC</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-3 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> <li>at AC-1 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> <li>at AC-9 maximum</li> <li>at AC-1 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 maxi</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>282 A; Use minimum cross-section acc. to AC-1 rated value</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-3 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>250 1/h</li> </ul> Control circuit/ Control	-	
Ilimited 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-3 e maximum  at AC-4 maximum  at AC-4 maximum  at AC-4 maximum  at AC-4 maximum  control circuit/ Control	-	
no-load switching frequency       5 000 1/h         operating frequency       1 000 1/h         • at AC-1 maximum       600 1/h         • at AC-2 maximum       800 1/h         • at AC-3 maximum       800 1/h         • at AC-4 maximum       250 1/h         Control circuit/ Control	-	
● at AC  operating frequency  ● at AC-1 maximum  ● at AC-2 maximum  ● at AC-3 maximum  ● at AC-3 maximum  ● at AC-3e maximum  ● at AC-4 maximum  ● at AC-4 maximum  Control circuit/ Control		229 A, USE MIMIMUM Cross-section acc. to AU-1 rated value
operating frequency         • at AC-1 maximum       1 000 1/h         • at AC-2 maximum       600 1/h         • at AC-3 maximum       800 1/h         • at AC-3e maximum       800 1/h         • at AC-4 maximum       250 1/h         Control circuit/ Control		5 000 A/L
<ul> <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-3e maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>250 1/h</li> </ul> Control circuit/ Control		5 UUU 1/N
<ul> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-3e maximum</li> <li>at AC-3e maximum</li> <li>at AC-4 maximum</li> <li>250 1/h</li> </ul> Control circuit/ Control		
<ul> <li>at AC-3 maximum</li> <li>at AC-3e maximum</li> <li>at AC-4 maximum</li> <li>250 1/h</li> </ul> Control circuit/ Control		
at AC-3e maximum     at AC-4 maximum  Control circuit/ Control  800 1/h 250 1/h	• at AC-2 maximum	600 1/h
• at AC-4 maximum  Control circuit/ Control	• at AC-3 maximum	800 1/h
Control circuit/ Control	• at AC-3e maximum	800 1/h
	• at AC-4 maximum	250 1/h
type of voltage of the control supply voltage AC	Control circuit/ Control	
	type of voltage of the control supply voltage	AC

control supply voltage at AC	
at 50 Hz rated value	230 V
at 60 Hz rated value	230 V
operating range factor control supply voltage rated value of magnet coil at AC	
● at 50 Hz	0.8 1.1
● at 60 Hz	0.85 1.1
apparent pick-up power of magnet coil at AC	
● at 50 Hz	210 VA
• at 60 Hz	188 VA
inductive power factor with closing power of the coil	
● at 50 Hz	0.69
• at 60 Hz	0.65
apparent holding power of magnet coil at AC	
● at 50 Hz	17.2 VA
• at 60 Hz	16.5 VA
inductive power factor with the holding power of the coil	
● at 50 Hz	0.36
• at 60 Hz	0.39
closing delay	
• at AC	10 80 ms
opening delay	
• at AC	10 18 ms
arcing time	10 20 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous contact	1
number of NO contacts for auxiliary contacts instantaneous contact	1
operational current at AC-12 maximum	10 A
operational current at AC-15	
at 230 V rated value	10 A
• at 400 V rated value	3 A
• at 500 V rated value	2 A
at 690 V rated value	1 A
operational current at DC-12	
• at 24 V rated value	10 A
• at 48 V rated value	6 A
<ul> <li>at 60 V rated value</li> </ul>	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	
• 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	52 A
at 600 V rated value	52 A
yielded mechanical performance [hp]	
<ul> <li>for single-phase AC motor</li> </ul>	
— at 110/120 V rated value	3 hp
— at 230 V rated value	10 hp

• for 3-phase AC motor		
— at 200/208 V rated value	15 hp	
<ul> <li>at 220/230 V rated value</li> </ul>	15 hp	
— at 460/480 V rated value	40 hp	
— at 575/600 V rated value	50 hp	
contact rating of auxiliary contacts according to UL	A600 / P600	
Short-circuit protection		
design of the fuse link		
<ul> <li>for short-circuit protection of the main circuit</li> </ul>		
— with type of coordination 1 required	gG: 160 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 kA)	
— with type of assignment 2 required	gG: 80A (690V,100kA), aM: 50A (690V,100kA), BS88: 63A (415V,80kA)	
• for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)	
Installation/ mounting/ dimensions		
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface	
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715	
side-by-side mounting	Yes	
height	114 mm	
width	55 mm	
depth	130 mm	
required spacing		
with side-by-side mounting		
— forwards	10 mm	
— upwards	10 mm	
— downwards	10 mm	
— at the side	0 mm	
	OTHILL	
• for grounded parts	10	
— forwards	10 mm	
— upwards	10 mm	
— at the side	6 mm	
— downwards	10 mm	
for live parts		
— forwards	10 mm	
— upwards	10 mm	
— downwards	10 mm	
— at the side	6 mm	
Connections/ Terminals		
type of electrical connection		
for main current circuit	screw-type terminals	
<ul> <li>for auxiliary and control circuit</li> </ul>	screw-type terminals	
<ul> <li>at contactor for auxiliary contacts</li> </ul>	Screw-type terminals	
of magnet coil	Screw-type terminals	
type of connectable conductor cross-sections for main contacts		
solid or stranded	2x (1 35 mm²), 1x (1 50 mm²)	
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 25 mm²), 1x (1 35 mm²)	
connectable conductor cross-section for main contacts		
finely stranded with core end processing	1 35 mm²	
connectable conductor cross-section for auxiliary contacts		
solid or stranded	0.5 2.5 mm²	
finely stranded with core end processing	0.5 2.5 mm²	
type of connectable conductor cross-sections	<u></u>	
for auxiliary contacts		
•	2v (0.5	
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	
for AWG cables for auxiliary contacts  AWG number as coded connectable conductor cross  costion	2x (20 16), 2x (18 14)	
section	40 4	
• for main contacts	18 1	
for auxiliary contacts	20 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
suitability for use safety-related switching OFF	Yes
B10 value with high demand rate according to SN 31920	1 000 000
proportion of dangerous failures	
<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 %
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
T1 value for proof test interval or service life according to IEC 61508	20 a
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
Cartificates/approvals	

Certificates/ approvals

#### **General Product Approval**



Confirmation





<u>KC</u>



**Functional** Safety/Safety of Ma-**EMC** chinery

**Declaration of Conformity** 

**Test Certificates** 



Type Examination Certificate





Type Test Certificates/Test Report

Special Test Certificate

### Marine / Shipping













Marine / Shipping Railway **Dangerous Good Environment** 



Confirmation

Confirmation

Vibration and Shock

**Transport Information** 

**Environmental Confirmations** 

#### **Further information**

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2036-1AL20

Cax online generator

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2036-1AL20

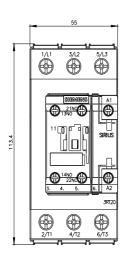
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

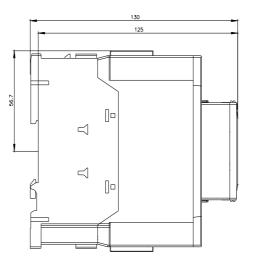
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2036-1AL20&lang=en

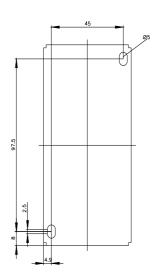
Characteristic: Tripping characteristics, I2t, Let-through current

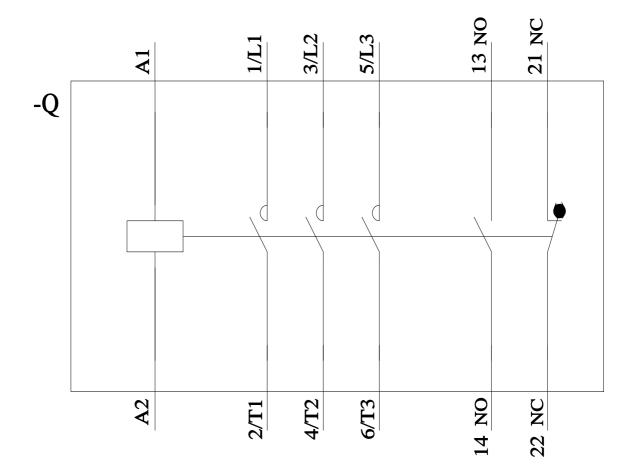
https://support.industry.siemens.com/cs/ww/en/ps/3RT2036-1AL20/char

Further characteristics (e.g. electrical endurance, switching frequency)
<a href="http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2036-1AL20&objecttype=14&gridview=view1">http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2036-1AL20&objecttype=14&gridview=view1</a>









last modified:

8/15/2023

3RT20361AL20 Page 8/8	

## **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Siemens:

3RT20361AL20