## **SIEMENS**

Data sheet 3RT2035-1NB30



power contactor, AC-3 40 A, 18.5 kW / 400 V 1 NO + 1 NC, AC / DC 20-33 V, with varistor, 3-pole, Size S2, screw terminal

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S2
product extension	
<ul> <li>function module for communication</li> </ul>	No
<ul> <li>auxiliary switch</li> </ul>	Yes
power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	6.6 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	2.2 W
<ul> <li>without load current share typical</li> </ul>	2 W
insulation voltage	
<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	690 V
<ul> <li>of auxiliary circuit with degree of pollution 3 rated value</li> </ul>	690 V
surge voltage resistance	
<ul> <li>of main circuit rated value</li> </ul>	6 kV
<ul> <li>of auxiliary circuit rated value</li> </ul>	6 kV
maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at AC	7.7g / 5 ms, 4.5g / 10 ms
• at DC	7.7g / 5 ms, 4.5g / 10 ms
shock resistance with sine pulse	
• at AC	12g / 5 ms, 7g / 10 ms
• at DC	12g / 5 ms, 7g / 10 ms
mechanical service life (switching 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)	10/01/2014
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
during operation	-25 +60 °C
during storage	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %

Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
<ul> <li>at AC-3e rated value maximum</li> </ul>	690 V
operational current	
<ul> <li>at AC-1 at 400 V at ambient temperature 40 °C</li> </ul>	60 A
rated value	
• at AC-1	00.4
<ul> <li>up to 690 V at ambient temperature 40 °C rated value</li> </ul>	60 A
— up to 690 V at ambient temperature 60 °C	55 A
rated value	00 / L
• at AC-3	
— at 400 V rated value	41 A
— at 500 V rated value	41 A
— at 690 V rated value	24 A
• at AC-3e	
— at 400 V rated value	41 A
— at 500 V rated value	41 A
— at 690 V rated value	24 A
<ul> <li>at AC-4 at 400 V rated value</li> </ul>	35 A
<ul> <li>at AC-5a up to 690 V rated value</li> </ul>	52.8 A
<ul> <li>at AC-5b up to 400 V rated value</li> </ul>	33.2 A
• at AC-6a	
— up to 230 V for current peak value n=20 rated	36.5 A
value	
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	36.5 A
up to 500 V for current peak value n=20 rated	36.5 A
value	30.3 A
— up to 690 V for current peak value n=20 rated	24 A
value	
• at AC-6a	
<ul> <li>up to 230 V for current peak value n=30 rated</li> </ul>	24.2 A
value	
— up to 400 V for current peak value n=30 rated	24.2 A
value	24.2.4
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	24.2 A
up to 690 V for current peak value n=30 rated	24 A
value	277
minimum cross-section in main circuit at maximum AC-1	16 mm²
rated value	
operational current for approx. 200000 operating	
cycles at AC-4	
at 400 V rated value	22 A
at 690 V rated value	18.5 A
operational current	
• at 1 current path at DC-1	55.4
— at 24 V rated value	55 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
<ul> <li>with 2 current paths in series at DC-1</li> <li>at 24 V rated value</li> </ul>	55 A
— at 24 v rated value — at 110 V rated value	55 A 45 A
— at 220 V rated value	5 A
— at 440 V rated value	1 A
— at 440 V rated value  — at 600 V rated value	1 A 0.8 A
	0.0 A
<ul> <li>with 3 current paths in series at DC-1</li> <li>at 24 V rated value</li> </ul>	55 A
— at 110 V rated value	55 A
— at 220 V rated value	45 A
— at 220 v rateu value	TOTA

** at 1 current path at DC-3 at DC-5	— at 440 V rated value	2.9 A
	<ul><li>— at 600 V rated value</li></ul>	1.4 A
	<ul> <li>at 1 current path at DC-3 at DC-5</li> </ul>	
	<ul><li>— at 24 V rated value</li></ul>	35 A
	— at 220 V rated value	1 A
• with 2 current paths in series at DC-3 at DC-5 — al 24 V rated value — at 110 V rated value — at 440 V rated value — at 600 V rated value — at 110 V rated value — at 120 V rated value — at 230 V rated value — at 400 V rated value — at 600 V rated val	— 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 110 V rated value	25 A
	— at 220 V rated value	5 A
	— at 440 V rated value	0.27 A
- with 3 current paths in series at DC-3 at DC-5 - at 24 V rated value - at 110 V rated value - at 220 V rated value - at 200 V rated value - at 800 V rated value - at 800 V rated value - at 800 V rated value - at 400 V rated value - at 400 V rated value - at 900 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		
	-	55 A
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• at AC-3		19.5 kW
- at 230 V rated value - at 400 V rated value - at 690 V rated value - at 690 V rated value - at 230 V rated value - at 400 V rated value - at 690 V ror 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 5		TO.O NAA
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- at 500 V rated value - at 690 V rated value ) perating power for approx. 200000 operating cycles at AC-4  • at 400 V rated value • at 690 V rated value • up to 230 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 690 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 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=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 •		
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operating apparent power at AC-6a  • up to 230 V for current peak value n=30 rated value • up to 400 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C  • limited to 1 s switching at zero current maximum • limited to 5 s switching at zero current maximum • limited to 10 s switching at zero current maximum • limited to 30 s switching at zero current maximum • limited to 30 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum • limited to 60 s switching at zero current maximum no-load switching frequency • at AC • at DC  operating frequency • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-3 maximum • at AC-4 maximum • at AC-5 maximum • at AC-4 maximum • at AC-5 maximum • at AC-6 maximum • at AC-7 maximum • at AC-8 maximum • at AC-9 maximum	·	
up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C  limited to 1 s switching at zero current maximum limited to 5 s switching at zero current maximum limited to 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 10 s switching at zero current maximum limited to 60 s switchi		20.0 NVA
<ul> <li>up to 400 V for current peak value n=30 rated value</li> <li>up to 500 V for current peak value n=30 rated value</li> <li>up to 690 V for current peak value n=30 rated value</li> <li>short-time withstand current in cold operating state up to 40 °C</li> <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 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>no-load switching frequency</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-4 maximum</li> <li>at AC-5 maximum</li> <li>at AC-4 maximum</li> <li>at AC-5 maximum</li> <li>at AC-5 maximum</li> <li>at AC-6 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-5 maximum</li> <li>at AC-6 maximum</li> <li>at AC-1 maximum&lt;</li></ul>		0.6 12//
<ul> <li>up to 500 V for current peak value n=30 rated value</li> <li>up to 690 V for current peak value n=30 rated value</li> <li>short-time withstand current in cold operating state up to 40 °C</li> <li>ilimited to 1 s switching at zero current maximum</li> <li>ilimited to 10 s switching at zero current maximum</li> <li>ilimited to 10 s switching at zero current maximum</li> <li>ilimited to 30 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current maximum</li> <li>ilimited to 60 s switching at zero current</li></ul>	·	
• 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     • limited to 60 s switching at zero current maximum     • limited to 60 s switching at zero current maximum     no-load switching frequency     • at AC     • at DC     • at DC     • at AC-1 maximum     • at AC-2 maximum     • at AC-3 maximum     • at AC-3 maximum     • at AC-4 maximum     • at AC-5 workship at zero current maximum     • at AC-4 maximum     • at AC-5 workship at zero current maximum     • at AC-5 workship at zero current maximum     • at AC-6 workship at zero current maximum     1		
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 no-load switching frequency • at AC • at DC • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-3 maximum • at AC-4 maximum • at AC-4 maximum • at AC-4 maximum • at AC-7 control circuit/ Control  type of voltage of the control supply voltage	·	
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 no-load switching frequency • at AC • at DC • at AC-1 maximum • at AC-2 maximum • at AC-3 maximum • at AC-3 maximum • at AC-4 maximum • at AC-4 maximum • at AC-4 maximum • at AC-5 voltage of the control supply voltage   843 A; Use minimum cross-section acc. to AC-1 rated value  400 A; Use minimum cross-section acc. to AC-1 rated value  156 A; Use minimum cross-section acc. to A	·	28.0 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 10 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>241 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>196 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>196 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>196 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>196 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>196 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>196 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>196 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>196 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>196 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>196 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>196 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>196 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>196 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>196 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>196 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>196 A; Use minimum cross-section acc.</li> <li>196 A; Use minimum cross-section acc.</li> <li>196 A; Use minimum cross-section acc.</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 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>no-load switching frequency</li> <li>at AC</li> <li>at DC</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-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-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-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-1 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-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-3</li></ul>	•	843 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>no-load switching frequency</li> <li>at AC</li> <li>at DC</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-3 e maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-5 most num</li> <li>at AC-6 most num</li> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> <li>at AC-5 maximum</li> <li>at AC-6 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-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-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-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC</li></ul>	_	
<ul> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>no-load switching frequency</li> <li>at AC</li> <li>at DC</li> <li>1 500 1/h</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-3e maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>at AC-5 maximum</li> <li>at AC-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-3e maximum</li> <li>at AC-3e maximum</li> <li>at AC-4 maximum</li> <li>AC-1 maximum cross-section acc. to AC-1 rated value</li> <li>196 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>196 A; Use minimum cross-section acc. to AC-1 rated value</li> <li>196 A; Use minimum cross-section acc. to AC-1 maximum</li> <li>190 1/h</li> <li>AC-1 maximum cross-section acc. to AC-1 rated value</li> <li>100 1/h</li> <li>AC-1 maximum cross-section acc. to AC-1 rated value</li> <li>AC-1 maximum cross-section acc. to AC-1 rated value</li> <li>100 1/h</li> <li>AC-1 maximum cross-section acc. to AC-1 maximum</li> <li>AC-1 maximum cross-section acc.</li></ul>		
<ul> <li>limited to 60 s switching at zero current maximum no-load switching frequency</li> <li>at AC</li> <li>at DC</li> <li>1 500 1/h</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>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-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-1 maximum</li> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> <li>at AC-1 maximum</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-3 maximum</li> <li>at AC-3 maximum</li> <li>at AC-4 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> &lt;</ul>		
no-load switching frequency	e e e e e e e e e e e e e e e e e e e	
<ul> <li>at AC</li> <li>at DC</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-3 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>other AC-4 maximum</li> <li>other AC-4 maximum</li> <li>other AC-4 maximum</li> <li>other AC-4 maximum</li> <li>ather AC-4 maximum</li> <li>at</li></ul>		130 A, OSE HIMIMIUM GIOSS-SECTION ACC. TO AC-1 Tateu value
<ul> <li>at DC</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-3e maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>ot AC-4 maximum</li> <li>ot AC-4 maximum</li> <li>ot AC-6 maximum</li> <li>ot AC-7 maximum</li> <li>ot AC-8 maximum</li> <li>ot AC-9 maximum</li> <li>ot AC-9 maximum</li> <li>ot AC-1 maximum</li> <li>ot AC-1</li></ul>		1 500 1/b
operating frequency         1 200 1/h           • at AC-1 maximum         750 1/h           • at AC-3 maximum         1 000 1/h           • at AC-3e maximum         1 000 1/h           • at AC-4 maximum         300 1/h           Control circuit/ Control           type of voltage of the control supply voltage   AC/DC		
<ul> <li>at AC-1 maximum         <ul> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>1 000 1/h</li> <li>at AC-3e maximum</li> <li>1 000 1/h</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> </ul> </li> <li>Control circuit/ Control</li> <li>type of voltage of the control supply voltage</li> </ul> AC/DC		1 500 1/11
<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>300 1/h</li> </ul> Control circuit/ Control type of voltage of the control supply voltage AC/DC		1 200 1/h
<ul> <li>at AC-3 maximum         <ul> <li>at AC-3e maximum</li> <li>1 000 1/h</li> </ul> </li> <li>at AC-4 maximum         <ul> <li>300 1/h</li> </ul> </li> <li>Control circuit/ Control</li> <li>type of voltage of the control supply voltage         <ul> <li>AC/DC</li> </ul> </li> </ul>		
• at AC-3e maximum     • at AC-4 maximum     • at AC-4 maximum  Control circuit/ Control  type of voltage of the control supply voltage  AC/DC		
at AC-4 maximum     300 1/h  Control circuit/ Control  type of voltage of the control supply voltage  AC/DC		
Control circuit/ Control  type of voltage of the control supply voltage AC/DC		
type of voltage of the control supply voltage AC/DC		300 1/n
	Control circuit/ Control	
control supply voltage at AC	type of voltage of the control supply voltage	AC/DC
· · · · · · · · · · · · · · · · · · ·	control supply voltage at AC	

<ul> <li>at 50 Hz rated value</li> </ul>	20 33 V
at 60 Hz rated value	20 33 V
control supply voltage at DC	
rated value	20 33 V
operating range factor control supply voltage rated	
value of magnet coil at DC	
<ul><li>initial value</li></ul>	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
inrush current peak	3 A
duration of inrush current peak	50 μs
locked-rotor current mean value	1 A
locked-rotor current peak	2.6 A
duration of locked-rotor current	230 ms
holding current mean value	40 mA
apparent pick-up power of magnet coil at AC	
• at 50 Hz	40 VA
• at 60 Hz	40 VA
apparent holding power of magnet coil at AC	
● at 50 Hz	2 VA
● at 60 Hz	2 VA
closing power of magnet coil at DC	23 W
holding power of magnet coil at DC	1 W
closing delay	
• at AC	35 110 ms
• at DC	35 110 ms
opening delay	
• at AC	30 55 ms
at DC	30 55 ms
• at DC	33 35 me
arcing time	10 20 ms
arcing time	10 20 ms
arcing time control version of the switch operating mechanism	10 20 ms
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact	10 20 ms Standard A1 - A2
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts	10 20 ms Standard A1 - A2
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact	10 20 ms Standard A1 - A2
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum	10 20 ms Standard A1 - A2
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15	10 20 ms Standard A1 - A2
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  • at 230 V rated value	10 20 ms Standard A1 - A2
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  • at 230 V rated value • at 400 V rated value	10 20 ms Standard A1 - A2
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  • at 230 V rated value • at 400 V rated value • at 500 V rated value	10 20 ms Standard A1 - A2
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value	10 20 ms Standard A1 - A2
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value operational current at DC-12	10 20 ms Standard A1 - A2
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value operational current at DC-12 at 24 V rated value	10 20 ms Standard A1 - A2
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value operational current at DC-12 at 24 V rated value at 48 V rated value at 48 V rated value	10 20 ms Standard A1 - A2  1  1  10 A  10 A  3 A  2 A  1 A  10 A  6 A
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 60 V rated value	10 20 ms Standard A1 - A2  1  1  10 A  10 A  3 A  2 A  1 A  10 A  6 A  6 A
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 60 V rated value • at 60 V rated value • at 110 V rated value	10 20 ms Standard A1 - A2  1  1  10 A  10 A  3 A  2 A  1 A  10 A  6 A  6 A  6 A  3 A
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value at 690 V rated value operational current at DC-12  at 24 V rated value at 48 V rated value at 60 V rated value at 60 V rated value at 110 V rated value at 110 V rated value at 125 V rated value	10 20 ms Standard A1 - A2  1 1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12  • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 220 V rated value	10 20 ms Standard A1 - A2  1  1  10 A  10 A  3 A  2 A  1 A  10 A  6 A  6 A  6 A  7 A  8 A  8 A  9 A  1 A
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12  • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value	10 20 ms Standard A1 - A2  1 1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value operational current at DC-12  at 24 V rated value at 48 V rated value at 48 V rated value at 110 V rated value at 125 V rated value at 125 V rated value at 120 V rated value at 600 V rated value	10 20 ms Standard A1 - A2  1  1  10 A  10 A  3 A  2 A  1 A  10 A  6 A  6 A  3 A  2 A  1 A  1 A  0.15 A
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value at 690 V rated value operational current at DC-12  at 24 V rated value at 48 V rated value at 110 V rated value at 125 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 600 V rated value at 220 V rated value at 600 V rated value at 220 V rated value	10 20 ms Standard A1 - A2  1  1  10 A  10 A  3 A  2 A  1 A  10 A  6 A  6 A  3 A  2 A  1 A  0.15 A
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12  • at 24 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 24 V rated value • at 24 V rated value • at 24 V rated value • at 27 V rated value • at 28 V rated value • at 29 V rated value • at 29 V rated value • at 24 V rated value • at 48 V rated value	10 20 ms Standard A1 - A2  1 1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 7 A 7 A 7 A 7 A 7 A 7 A 7 A 7 A 7 A 7
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value at 690 V rated value operational current at DC-12  at 24 V rated value at 48 V rated value at 110 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value	10 20 ms Standard A1 - A2  1 1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 1 A 0.15 A
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value operational current at DC-12  at 24 V rated value at 48 V rated value at 110 V rated value at 125 V rated value at 125 V rated value at 220 V rated value at 600 V rated value	10 20 ms Standard A1 - A2  1 1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A  10 A 2 A 2 A 1 A
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value operational current at DC-12  at 24 V rated value at 48 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 220 V rated value at 600 V rated value at 48 V rated value at 410 V rated value	10 20 ms Standard A1 - A2  1 1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A  10 A 2 A 2 A 1 A 0.9 A
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value operational current at DC-12  at 24 V rated value at 48 V rated value at 48 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 220 V rated value at 48 V rated value at 48 V rated value at 48 V rated value at 600 V rated value at 125 V rated value at 110 V rated value at 125 V rated value at 110 V rated value at 110 V rated value at 110 V rated value at 125 V rated value	10 20 ms Standard A1 - A2  1 1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A  10 A 2 A 2 A 1 A 0.9 A 0.3 A
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value operational current at DC-12  at 24 V rated value at 48 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 600 V rated value at 48 V rated value at 600 V rated value at 600 V rated value at 110 V rated value at 125 V rated value at 125 V rated value at 125 V rated value at 127 V rated value at 128 V rated value at 129 V rated value at 129 V rated value at 120 V rated value at 125 V rated value	10 20 ms Standard A1 - A2  1 1 1 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A  10 A 2 A 2 A 1 A 0.9 A 0.3 A 0.1 A
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15  at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value operational current at DC-12  at 24 V rated value at 48 V rated value at 48 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 220 V rated value at 48 V rated value at 48 V rated value at 48 V rated value at 600 V rated value at 125 V rated value at 110 V rated value at 125 V rated value at 110 V rated value at 110 V rated value at 110 V rated value at 125 V rated value	10 20 ms Standard A1 - A2  1 1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A  10 A 2 A 2 A 1 A 0.9 A 0.3 A

full load auguent (ELA) for 2 whose AC motor	
full-load current (FLA) for 3-phase AC motor	40 A
<ul><li>at 480 V rated value</li><li>at 600 V rated value</li></ul>	41 A
	41 A
yielded mechanical performance [hp]	
• for single-phase AC motor	0.1
— at 110/120 V rated value	3 hp
— at 230 V rated value	7.5 hp
• for 3-phase AC motor	
— at 200/208 V rated value	10 hp
— at 220/230 V rated value	15 hp
— at 460/480 V rated value	30 hp
— at 575/600 V rated value	40 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>	
<ul> <li>— with type of coordination 1 required</li> </ul>	gG: 160 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415
	V, 80 kA)
<ul> <li>— with type of assignment 2 required</li> </ul>	gG: 80A (690V,100kA), aM: 50A (690V,100kA), BS88: 63A (415V,80kA)
for short-circuit protection of the auxiliary switch	gG: 10 A (500 V, 1 kA)
required	
Installation/ mounting/ dimensions	
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail
rastering method	according to DIN EN 60715
<ul> <li>side-by-side mounting</li> </ul>	Yes
height	114 mm
width	55 mm
depth	130 mm
required spacing	100 11111
with side-by-side mounting	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
for grounded parts	O Hilli
— forwards	10 mm
— upwards	10 mm
— at the side	6 mm
— druie side — downwards	10 mm
	10 111111
<ul><li>for live parts</li><li>forwards</li></ul>	10 mm
	10 mm
— upwards — downwards	
— downwards — at the side	10 mm 6 mm
	O THIRT
Connections/ Terminals	
type of electrical connection	corou tuno terminale
• for main current circuit	screw-type terminals
for auxiliary and control circuit     at contracts for auxiliary contracts	screw-type terminals
at contactor for auxiliary contacts	Screw-type terminals
• of magnet coil	Screw-type terminals
type of connectable conductor cross-sections	
• for main contacts	Ov. (4 OF mans2) Av. (4 FO2)
— solid or stranded	2x (1 35 mm²), 1x (1 50 mm²)
— finely stranded with core end processing	2x (1 25 mm²), 1x (1 35 mm²)
at AWG cables for main contacts	2x (18 2), 1x (18 1)
connectable conductor cross-section for main contacts	
<ul> <li>finely stranded with core end processing</li> </ul>	1 35 mm²
connectable conductor cross-section for auxiliary contacts	
<ul> <li>solid or stranded</li> </ul>	0.5 2.5 mm²
• finely stranded with core end processing	0.5 2.5 mm²

type of connectable conductor cross-sections

for auxiliary contacts

- solid or stranded

— finely stranded with core end processing

• at AWG cables for auxiliary contacts

AWG number as coded connectable conductor cross section

• for main contacts

for auxiliary contacts

2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>) 2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)

2x (20 ... 16), 2x (18 ... 14)

18 ... 1

20 ... 14

Safety related data

product function

• mirror contact according to IEC 60947-4-1

• positively driven operation according to IEC 60947-

B10 value with high demand rate according to SN 31920 **proportion of dangerous failures** 

• with low demand rate according to SN 31920

• with high demand rate according to SN 31920

failure rate [FIT] with low demand rate according to SN 31920

T1 value for proof test interval or service life according to IEC 61508

protection class IP on the front according to IEC 60529

touch protection on the front according to IEC 60529 suitability for use

• safety-related switching OFF

Yes

No

1 000 000

40 % 73 %

100 FIT

20 y

IP20

finger-safe, for vertical contact from the front

Yes

Certificates/ approvals

**General Product Approval** 





Confirmation

**Miscellaneous** 

<u>KC</u>



**EMC** 

Functional Safety/Safety of Machinery

**Declaration of Conformity** 

**Test Certificates** 



Type Examination Certificate





Special Test Certificate

Type Test Certificates/Test Report

Marine / Shipping













Marine / Shipping

other

Railway

**Dangerous Good** 



Confirmation

Confirmation

Vibration and Shock

<u>Transport Information</u>

**Further information** 

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2035-1NB30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2035-1NB30

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2035-1NB30

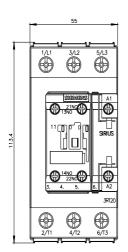
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax">http://www.automation.siemens.com/bilddb/cax</a> de.aspx?mlfb=3RT2035-1NB30&lang=en

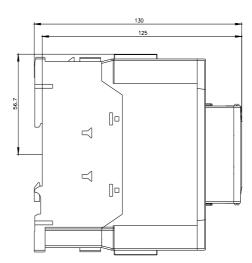
Characteristic: Tripping characteristics, I2t, Let-through current

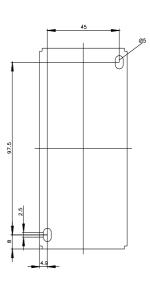
https://support.industry.siemens.com/cs/ww/en/ps/3RT2035-1NB30/char

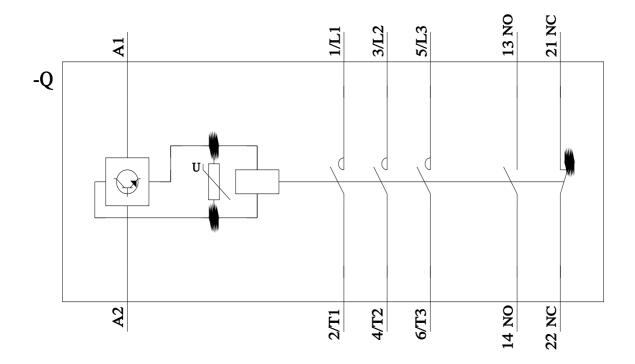
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2035-1NB30&objecttype=14&gridview=view1









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