SIEMENS

Data sheet 3RT2023-1NB30



power contactor, AC-3e/AC-3, 9 A, 4 kW / 400 V, 3-pole, 21-28 V AC/DC, 50/60 Hz, with integrated varistor, auxiliary contacts: 1 NO + 1 NC, screw terminal, size: S0

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S0
product extension	
 function module for communication 	No
auxiliary switch	Yes
power loss [W] for rated value of the current	
 at AC in hot operating state 	0.6 W
 at AC in hot operating state per pole 	0.2 W
without load current share typical	1.4 W
type of calculation of power loss depending on pole	quadratic
insulation voltage	
 of main circuit with degree of pollution 3 rated value 	690 V
of auxiliary circuit with degree of pollution 3 rated value	690 V
surge voltage resistance	
of main circuit rated value	6 kV
of auxiliary circuit rated value	6 kV
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at AC	7,5g / 5 ms, 4,7g / 10 ms
• at DC	10g / 5 ms, 7,5g / 10 ms
shock resistance with sine pulse	
• at AC	11,8g / 5 ms, 7,4g / 10 ms
• at DC	15g / 5 ms, 10g / 10 ms
mechanical service life (operating cycles)	
 of contactor typical 	10 000 000
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000
 of the contactor with added auxiliary switch block typical 	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8
Weight	0.573 kg
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
during operation	-25 +60 °C

relative humidity with 5°C according to IEC 60069-2-30 maximum relative humidity with 5°C according to IEC 60069-2-30 maximum reproduct Declaration (EPD) Friorizomental Product Declaration (EPD) Spoke warming potential (EOC ed) during manufacturing global warming potential (EOC ed) during operation 50 8 kg global warming potential (EOC ed) during operation 50 8 kg global warming potential (EOC ed) during operation 50 8 kg global warming potential (EOC ed) during operation 50 8 kg global warming potential (EOC ed) during operation 50 8 kg global warming potential (EOC ed) during operation 50 8 kg 4 8 AC-3 intent of NO contacts for main current circuit 7 anumber of NO contacts for main current circuit 7 at AC-3 intent of value maximum 600 V 600 V 7 at AC-3 ended value maximum 600 V 600 V 7 at AC-3 ended value maximum 600 V 7 at AC-3 ended value ended value 60 V 60 V at ambient temperature 40 °C rated value 60 V at a mobient temperature 60 °C rated value 60 V at AC-3 ended value 60 V rated value 60 V rated value 60 V rated value 60 V rated value 61 SOV rated value 61 SOV rated value 62 AC-3 ended SOV rated value 63 V rated value 64 AC-3 ended SOV rated value 65 V rated value 65 V rated value 65 V rated value 66 V V rated value 67 V pb 250 V for current peak value n-20 rated value 69 V pb 250 V for current peak value n-20 rated value 69 V pb 250 V for current peak value n-20 rated value 60 V pb 250 V for current peak value n-20 rated value 60 V pb 250 V for current peak value n-20 rated value 60 V pb 250 V for current peak value n-20 rated value 60 V pb 250 V for current peak value n-20 rated value 60 V pb 250 V for current peak value n-20 rated value 61 V pb 250 V for current peak value n-20 rated value 61 V pb 250 V for current peak value n-20 rated value 61 V pb 250 V for current peak value n-20 rated value 61 V pb 250 V for current peak value n-20 rated value 61 V pb 250 V for current peak value n-20 rated value 61 V pb 250 V for current peak value n-20 rated value 61 V pb 250 V for current peak value n-20 rate	during storage	-55 +80 °C
Section		
Environmental Product Declaration (EPD) Yes Spitable warming potential (CO2 eq) dutal S9.7 kg S9	relative humidity at 55 °C according to IEC 60068-2-30	
Environmental Product Declaration(EPD) Yes		
global warming potential (CO2 eq) during manufacturing global warming potential (CO2 eq) during operation (S6.8 kg global warming potential (CO2 eq) during operation (S6.8 kg global warming potential (CO2 eq) during operation (S6.8 kg global warming potential (CO2 eq) during operation (S6.8 kg global warming potential (CO2 eq) during operation (S6.8 kg global warming potential (CO2 eq) during operation (S6.8 kg global warming potential (CO2 eq) during operation (S6.8 kg global warming operation (S6.8 kg global warming operation) (S6.8 kg global wa		
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global warming potential (CO2 eq) during operation 5.6.6 kg		
Social warming potential [CO2 eq] after end of life -0,828 kg		3.7 kg
Name of Poles for main current circuit 3 3 3 3 3 3 3 3 3		56.6 kg
number of NO contacts for main current circuit number of NO contacts for main contacts 3 3 number of NO contacts for main contacts 3 3 at AC-3 rated value maximum 690 V at AC-3 rated value maximum 690 V operational current		-0.626 kg
Number of NO contacts for main contacts September of NO contacts for NO contact		
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• at AC-3e rated value maximum operational current • at AC-1 at 400 v1 at ambient temperature 40 °C rated value • at AC-1 — up to 690 V at ambient temperature 40 °C rated value • up to 690 V at ambient temperature 60 °C rated value • up to 690 V at ambient temperature 60 °C rated value • at AC-3 — at 400 V rated value • at 500 V rated value • at 500 V rated value • at 690 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value • at AC-3 • at 400 V rated value • at AC-3 • at 400 V rated value • at AC-4 at 400 V rated value • at AC-5 up to 690 V rated value • at AC-6 up to 690 V rated value • at AC-6 up to 590 V rated value • at AC-6 up to 590 V rated value • at AC-6 up to 590 V rated value • at AC-6 up to 590 V rated value • at AC-6 up to 590 V rated value • at AC-6 up to 590 V for current peak value n=20 rated value • up to 590 V for current peak value n=20 rated value • up to 590 V for current peak value n=20 rated value • up to 590 V for current peak value n=20 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 590 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 • at AC-6 • up to 590 V for current peak value n=30 rated value • at AC-6 • up to 590 V for current peak value n=30 rated value • at AC-6 • at 400 V rated value • at 690 V rated value • at 400 V rated value		
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value • at AC-1 — up to 690 V at ambient temperature 40 "C rated value" 40 A — up to 690 V at ambient temperature 60 "C rated value" 35 A • at 400 V rated value 9 A — at 400 V rated value 9 A — at 4500 V rated value 9 A — at 4500 V rated value 9 A — at 400 V rated value 9 A • at AC-3a up to 690 V rated value 35.2 A • at AC-5b up to 400 V rated value 7.4 A • at AC-5b up to 400 V rated value n=20 rated value 11.4 A — up to 500 V for current peak value n=20 rated value 9.1 A • at AC-6a — up to 690 V for current peak value n=30 rated value 9.4 • at AC-6a — up to 400 V for current peak value n=30 rated value 1.6 A — up to 690 V for current peak value n=30 rated value <t< td=""><td>•</td><td></td></t<>	•	
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at 400 V rated value	value	35 A
at 500 V rated value		
• at AC-3e — at 400 V rated value — at 500 V rated value — at 690 V rated value — at 690 V rated value • at AC-4 at 400 V rated value • at AC-5a up to 690 V rated value • at AC-5a up to 690 V rated value • at AC-5a up to 690 V rated value • at AC-5a • at AC-5a • at AC-5a — up to 230 V for current peak value n=20 rated value — up to 400 V for current peak value n=20 rated value — up to 500 V for current peak value n=20 rated value — up to 500 V for current peak value n=20 rated value — up to 500 V for current peak value n=20 rated value — up to 500 V for current peak value n=30 rated value — up to 500 V for current peak value n=30 rated value — up to 500 V for current peak value n=30 rated value — up to 500 V for current peak value n=30 rated value — up to 500 V for current peak value n=30 rated value — up to 500 V for current peak value n=30 rated value — up to 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 — at 600 V rated value • at 100 V rated value — at 600 V rated value — at 420 V rated value — at 600 V rat	— at 500 V rated value	9 A
- at 400 V rated value		9 A
- at 500 V rated value	• at AC-3e	
- at 690 V rated value 9 A • at AC-4 at 400 V rated value 35.2 A • at AC-5a up to 690 V rated value 7.4 A • at AC-5a • at AC-5b up to 400 V rated value 7.4 A • at AC-6a - up to 230 V for current peak value n=20 rated value 11.4 A - up to 500 V for current peak value n=20 rated value 9 A - up to 590 V for current peak value n=20 rated value 9 A • at AC-6a - up to 230 V for current peak value n=20 rated value 9 A • at AC-6a - up to 590 V for current peak value n=30 rated value 9 A • at AC-6a - up to 590 V for current peak value n=30 rated value 7.6 A - up to 500 V for current peak value n=30 rated value 7.6 A - up to 690 V for current peak value n=30 rated value 6.1 A minimum cross-section in main circuit at maximum AC-1 rated value 9 at 400 V rated value 9 A • at 400 V rated value 3.3 A operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value 3.3 A operational current 9 at AC-1 - at 24 V rated value 4.5 A - at 60 V rated value 4.5 A - at 60 V rated value 4.5 A - at 440 V rated value 4.5 A - at 440 V rated value 4.5 A - at 440 V rated value 9.25 A	— at 400 V rated value	9 A
at AC-4 at 400 V rated value at AC-5a up to 690 V rated value at AC-5b up to 400 V rated value at AC-6a at AC-5b up to 400 V rated value 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 at AC-6a — up to 230 V for current peak value n=20 rated value 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 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 — up to 690 V for current peak value n=30 rated value — at 400 V rated value 4.1 A 3.3 A operational current for approx. 200000 operating cycles at AC-4 at 690 V rated value at 600 V rated value at 600 V rated value at 400 V rated value at 600 V rated value at 440 V rated value at 600 V rated value at 440 V rated value	— at 500 V rated value	9 A
• at AC-5a up to 690 V rated value • at AC-6b up to 400 V rated value • 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 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 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 operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value • at 1 current path at DC-1 — at 24 V rated value — at 600 V rated value — at 600 V rated value — at 400 V rated value — at 440 V rated value — at 600 V rated value — at 220 V rated value — at 600 V rated value	— at 690 V rated value	9 A
• at AC-5b up to 400 V rated value • at AC-6a — up to 230 V for current peak value n=20 rated value — up to 500 V for current peak value n=20 rated value — up to 690 V for current peak value n=20 rated value — up to 690 V for current peak value n=20 rated value — up to 690 V for current peak value n=30 rated value • 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 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 operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value - at 690 V rated value - at 10 V rated value - at 24 V rated value - at 440 V rated value - at 690 V rated value - at 690 V rated value - at 690 V rated value - at 400 V rated value - at 440 V rated value - at 400 V rated value - at 690 V rated value - at 220 V rated value - at 440 V rated value	 at AC-4 at 400 V rated value 	8.5 A
• 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 • 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 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 minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value - at 24 V rated value — at 24 V rated value — at 20 V rated value — at 440 V rated value — at 440 V rated value — at 690 V rated value	 at AC-5a up to 690 V rated value 	35.2 A
- 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 230 V for current peak value n=20 rated value - 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 - up to 690 V for current peak value n=30 rated value - 10 mm² 10 mm² 10 mm² 10 mm² 10 mm² 10 mm² 20 A - at 400 V rated value - at 690 V rated value - at 20 V rated value - at 20 V rated value - at 400 V rated value - at 600 V rated value	 at AC-5b up to 400 V rated value 	7.4 A
- 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 • 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 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 - at 400 V rated value - at 200 V rated value - at 200 V rated value - at 400 V rated value - at 600 V rated value - at 200 V rated value	• at AC-6a	
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- up to 690 V for current peak value n=20 rated value • 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 6.1 A minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value • at 1 current path at DC-1 - at 24 V rated value - at 60 V rated value - at 400 V rated value - at 440 V rated value - at 460 V rated value - at 600 V rated value - at 24 V rated value - at 24 V rated value - at 600 V rated value - at 600 V rated value - at 24 V rated value - 35 A	 up to 400 V for current peak value n=20 rated value 	11.4 A
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 minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 at 400 V rated value at 690 V rated value at 1 current path at DC-1 - at 24 V rated value - at 60 V rated value - at 60 V rated value - at 440 V rated value - at 600 V rated v	 up to 500 V for current peak value n=20 rated value 	9.1 A
- up to 230 V for current peak value n=30 rated value - up to 400 V for current peak value n=30 rated value - up to 500 V for current peak value n=30 rated value - up to 690 V for current peak value n=30 rated value - up to 690 V for current peak value n=30 rated value - up to 690 V for current peak value n=30 rated value 6.1 A minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value • at 1 current path at DC-1 - at 24 V rated value - at 60 V rated value - at 110 V rated value - at 220 V rated value - at 440 V rated value - at 440 V rated value - at 440 V rated value - at 600 V ra	 up to 690 V for current peak value n=20 rated value 	9 A
- up to 400 V for current peak value n=30 rated value - up to 500 V for current peak value n=30 rated value - up to 690 V for current peak value n=30 rated value - up to 690 V for current peak value n=30 rated value 6.1 A minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value • at 1 current path at DC-1 - at 24 V rated value - at 60 V rated value - at 110 V rated value - at 220 V rated value - at 440 V rated value - at 440 V rated value - at 600 V rated value	• at AC-6a	
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— up to 690 V for current peak value n=30 rated value minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 440 V rated value — at 600 V rated value — at 200 V rated value — at 440 V rated value — at 440 V rated value — at 600 V	— up to 400 V for current peak value n=30 rated value	7.6 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value • at 1 current path at DC-1 — at 24 V rated value 35 A — at 60 V rated value 20 A — at 110 V rated value 4.5 A — at 220 V rated value 1 A — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 600 V rated value 35 A 35 A 36 A 37 A 38 A 39 A 4.5 A 4.7 A 4.8 A 4.9 A	 up to 500 V for current peak value n=30 rated value 	6.1 A
value operational current for approx. 200000 operating cycles at AC-4 • at 400 V rated value 4.1 A • at 690 V rated value 3.3 A operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 400 V rated value — at 600 V rated value — at 600 V rated value 0.25 A • with 2 current paths in series at DC-1 — at 24 V rated value	— up to 690 V for current peak value n=30 rated value	6.1 A
AC-4 ● at 400 V rated value 4.1 A ● at 690 V rated value 3.3 A operational current ● at 1 current path at DC-1 - at 24 V rated value — at 60 V rated value 20 A — at 110 V rated value 4.5 A — at 220 V rated value 1 A — at 440 V rated value 0.4 A — at 600 V rated value 0.25 A ● with 2 current paths in series at DC-1 - at 24 V rated value	value	10 mm²
● at 690 V rated value operational current • at 1 current path at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 600 V rated value — at 24 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value 33 A 33 A 35 A		
operational current • at 1 current path at DC-1 — at 24 V rated value 35 A — at 60 V rated value 20 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 35 A	• at 400 V rated value	4.1 A
• at 1 current path at DC-1 — at 24 V rated value 35 A — at 60 V rated value 20 A — at 110 V rated value 4.5 A — at 220 V rated value 1 A — at 440 V rated value 0.4 A — at 600 V rated value 0.25 A • with 2 current paths in series at DC-1 — at 24 V rated value 35 A	at 690 V rated value	3.3 A
- at 24 V rated value 35 A - at 60 V rated value 20 A - at 110 V rated value 4.5 A - at 220 V rated value 1 A - at 440 V rated value 0.4 A - at 600 V rated value 0.25 A • with 2 current paths in series at DC-1 - at 24 V rated value 35 A	operational current	
- at 60 V rated value 20 A - at 110 V rated value 4.5 A - at 220 V rated value 1 A - at 440 V rated value 0.4 A - at 600 V rated value 0.25 A • with 2 current paths in series at DC-1 - at 24 V rated value 35 A	• at 1 current path at DC-1	
- at 110 V rated value 4.5 A - at 220 V rated value 1 A - at 440 V rated value 0.4 A - at 600 V rated value 0.25 A • with 2 current paths in series at DC-1 - at 24 V rated value 35 A	— at 24 V rated value	35 A
 — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value 35 A 	— at 60 V rated value	20 A
 — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value 35 A 	— at 110 V rated value	4.5 A
 at 600 V rated value with 2 current paths in series at DC-1 at 24 V rated value 35 A 	— at 220 V rated value	1 A
• with 2 current paths in series at DC-1 — at 24 V rated value 35 A	— at 440 V rated value	0.4 A
— at 24 V rated value 35 A	— at 600 V rated value	0.25 A
	 with 2 current paths in series at DC-1 	
— at 60 V rated value 35 A	— at 24 V rated value	35 A
	— at 60 V rated value	35 A

at 110 V rated value	
- at 440 V rated value	
 at 600 V rated value with 3 current paths in series at DC-1 — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 24 V rated value — at 24 V rated value — at 60 V rated value — at 110 V rated value — at 110 V rated value — at 440 V rated value — at 440 V rated value — at 220 V rated value — at 440 V rated value — at 440 V rated value — at 600 V rated value — at 60 V rated value — at 75 A 	
 with 3 current paths in series at DC-1 at 24 V rated value at 60 V rated value 35 A at 110 V rated value 35 A at 110 V rated value 35 A at 220 V rated value 35 A at 440 V rated value 2.9 A at 600 V rated value 4.4 A at 1 current path at DC-3 at DC-5 at 24 V rated value 5 A at 110 V rated value 2.5 A at 220 V rated value 1 A at 440 V rated value 0.09 A at 600 V rated value o.06 A with 2 current paths in series at DC-3 at DC-5 at 24 V rated value 35 A at 60 V rated value 35 A 	
- at 24 V rated value 35 A - at 60 V rated value 35 A - at 110 V rated value 35 A - at 220 V rated value 35 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 5 A - at 110 V rated value 5 A - at 110 V rated value 1.4 A • at 1 v rated value 5 A - at 110 V rated value 1.4 A - at 440 V rated value 1.5 A - at 220 V rated value 1.5 A - at 440 V rated value 1.5 A - at 600 V rated value 1.5 A - at 600 V rated value 1.5 A - at 600 V rated value 1.5 A - at 24 V rated value 1.5 A - at 24 V rated value 1.5 A - at 60 V rated value 1.5 A - at 60 V rated value 1.5 A	
- at 60 V rated value 35 A - at 110 V rated value 35 A - at 220 V rated value 35 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 5 A - at 10 V rated value 5.4 - at 110 V rated value 2.5 A - at 220 V rated value 1.4 - at 440 V rated value 1.5 - at 240 V rated value 1.6 - at 440 V rated value 1.7 - at 440 V rated value 1.8 - at 400 V rated value 1.8 - at 600 V rated value 1.8 - at 20 V rated value 1.9 - at 600 V rated value 1.9 - at 6	
- at 110 V rated value 35 A - at 220 V rated value 2.9 A - at 440 V rated value 1.4 A - at 600 V rated value 1.4 A • at 1 current path at DC-3 at DC-5 - at 24 V rated value 2.9 A - at 60 V rated value 5 A - at 110 V rated value 2.5 A - at 1220 V rated value 1 A - at 440 V rated value 1 A - at 440 V rated value 1 A - at 440 V rated value 1 A - at 600 V rated value 1 A - at 440 V rated value 1 A - at 600 V rated value 1 A	
- at 220 V rated value 2.9 A - at 440 V rated value 1.4 A • at 1 current path at DC-3 at DC-5 - at 24 V rated value 20 A - at 60 V rated value 5 A - at 110 V rated value 2.5 A - at 220 V rated value 1 A - at 440 V rated value 1 A - at 440 V rated value 1 A - at 440 V rated value 1 A - at 600 V rated value 1 A - at 600 V rated value 1 A - at 600 V rated value 35 A - at 24 V rated value 35 A - at 26 V rated value 35 A - at 60 V rated value 35 A - at 60 V rated value 35 A - at 110 V rated value 35 A - at 110 V rated value 15 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 20 A - at 60 V rated value 5 A - at 110 V rated value 2.5 A - at 220 V rated value 1 A - at 440 V rated value 0.09 A - at 600 V rated value 0.06 A • with 2 current paths in series at DC-3 at DC-5 - at 24 V rated value 35 A - at 60 V rated value 35 A - at 60 V rated value 35 A - at 110 V rated value 15 A	
- at 600 V rated value 1.4 A • at 1 current path at DC-3 at DC-5 - at 24 V rated value 20 A - at 60 V rated value 5 A - at 110 V rated value 1 A - at 220 V rated value 1 A - at 440 V rated value 0.09 A - at 600 V rated value 0.06 A • with 2 current paths in series at DC-3 at DC-5 - at 24 V rated value 35 A - at 60 V rated value 35 A - at 110 V rated value 15 A	
• at 1 current path at DC-3 at DC-5 — at 24 V rated value 20 A — at 60 V rated value 5 A — at 110 V rated value 2.5 A — at 220 V rated value 1 A — at 440 V rated value 0.09 A — at 600 V rated value 0.06 A • with 2 current paths in series at DC-3 at DC-5 — at 24 V rated value 35 A — at 60 V rated value 35 A — at 110 V rated value 15 A	
- at 24 V rated value 20 A - at 60 V rated value 5 A - at 110 V rated value 2.5 A - at 220 V rated value 1 A - at 440 V rated value 0.09 A - at 600 V rated value 0.06 A • with 2 current paths in series at DC-3 at DC-5 - at 24 V rated value 35 A - at 60 V rated value 35 A - at 110 V rated value 15 A	
- at 60 V rated value 5 A - at 110 V rated value 2.5 A - at 220 V rated value 1 A - at 440 V rated value 0.09 A - at 600 V rated value 0.06 A • with 2 current paths in series at DC-3 at DC-5 - at 24 V rated value 35 A - at 60 V rated value 35 A - at 110 V rated value 15 A	
 — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value ■ with 2 current paths in series at DC-3 at DC-5 — at 24 V rated value — at 60 V rated value — at 60 V rated value — at 110 V rated value — at 110 V rated value — at 15 A 	
 — at 220 V rated value — at 440 V rated value — at 600 V rated value • with 2 current paths in series at DC-3 at DC-5 — at 24 V rated value — at 60 V rated value — at 110 V rated value 1 A 1 A 1 A 	
 — at 440 V rated value 0.09 A — at 600 V rated value 0.06 A • with 2 current paths in series at DC-3 at DC-5 — at 24 V rated value 35 A — at 60 V rated value 35 A — at 110 V rated value 15 A 	
 at 600 V rated value with 2 current paths in series at DC-3 at DC-5 at 24 V rated value at 60 V rated value at 110 V rated value 15 A 	
 with 2 current paths in series at DC-3 at DC-5 — at 24 V rated value — at 60 V rated value — at 110 V rated value 15 A 	
 at 24 V rated value at 60 V rated value at 110 V rated value 15 A 	
 at 60 V rated value at 110 V rated value 15 A 	
— at 110 V rated value 15 A	
— at 220 V rated value 3 A	
— at 440 V rated value 0.27 A	
— at 600 V rated value 0.16 A	
with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value 35 A	
— at 60 V rated value 35 A	
— at 110 V rated value 35 A	
— at 220 V rated value 10 A	
— at 440 V rated value 0.6 A	
— at 600 V rated value 0.6 A	
operating power	
at AC-2 at 400 V rated value 4 kW	
• at AC-3	
— at 230 V rated value 2.2 kW	
— at 400 V rated value 4 kW	
— at 500 V rated value 4 kW	
— at 690 V rated value 7.5 kW	
• at AC-3e	
— at 230 V rated value 2.2 kW	
— at 400 V rated value 4 kW	
— at 500 V rated value 4 kW	
— at 690 V rated value 7.5 kW	
operating power for approx. 200000 operating cycles at AC-	
• at 400 V rated value 2 kW	
• at 690 V rated value 2.5 kW	
operating apparent power at AC-6a	
• up to 230 V for current peak value n=20 rated value 4.5 kVA	
• up to 400 V for current peak value n=20 rated value 7.8 kVA	
• up to 500 V for current peak value n=20 rated value 7.8 kVA	
• up to 690 V for current peak value n=20 rated value 10.7 kVA	
operating apparent power at AC-6a	
• up to 230 V for current peak value n=30 rated value 3 kVA	
• up to 400 V for current peak value n=30 rated value 5.2 kVA	
• up to 500 V for current peak value n=30 rated value 5.2 kVA	
• up to 690 V for current peak value n=30 rated value 7.2 kVA	
short-time withstand current in cold operating state up to	
40 °C	
• limited to 1 s switching at zero current maximum 170 A; Use minimum cross-section acc. to AC-1 rated value	

a limited to E.a. quitables at some current and include	170 At Llea minimum group accition and to AC 4 metal distriction
limited to 5 s switching at zero current maximum	170 A; Use minimum cross-section acc. to AC-1 rated value
limited to 10 s switching at zero current maximum limited to 20 s switching at zero current maximum	140 A; Use minimum cross-section acc. to AC-1 rated value
limited to 30 s switching at zero current maximum	104 A; Use minimum cross-section acc. to AC-1 rated value
Iimited to 60 s switching at zero current maximum	88 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	4.500.4/1-
• at AC	1 500 1/h
• at DC	1 500 1/h
operating frequency	1 000 1/h
 at AC-1 maximum at AC-2 maximum 	1 000 1/h
 at AC-3 maximum at AC-3e maximum 	1 000 1/h 1 000 1/h
at AC-3e maximum at AC-4 maximum	300 1/h
Control circuit/ Control	300 1/11
type of voltage of the control supply voltage	AC/DC
control supply voltage at AC	AC/DC
at 50 Hz rated value	21 28 V
	21 28 V
at 60 Hz rated value control supply voltage at DC rated value	21 28 V
operating range factor control supply voltage rated value of	21 20 V
magnet coil at DC	
• initial value	0.7
• full-scale value	1.3
operating range factor control supply voltage rated value of	
magnet coil at AC	
at 50 Hz	0.7 1.3
• at 60 Hz	0.7 1.3
design of the surge suppressor	with varistor
inrush current peak	3 A
duration of inrush current peak	30 µs
locked-rotor current mean value	0.3 A
locked-rotor current peak	0.52 A
duration of locked-rotor current	180 ms
holding current mean value	45 mA
apparent pick-up power of magnet coil at AC	0.01/4
• at 50 Hz	6.6 VA
• at 60 Hz	6.7 VA
inductive power factor with closing power of the coil	0.00
• at 50 Hz	0.98
• at 60 Hz	0.98
apparent holding power	1.4.1/4
at minimum rated control supply voltage at DC at maximum rated control supply voltage at DC	1.4 VA 1.4 VA
at maximum rated control supply voltage at DC apparent holding power	1.T VA
at minimum rated control supply voltage at AC	
— at 50 Hz	1.9 VA
— at 50 Hz — at 60 Hz	2 VA
at maximum rated control supply voltage at AC	- W.
— at 50 Hz	1.9 VA
— at 50 Hz — at 60 Hz	2 VA
apparent holding power of magnet coil at AC	2 111
• at 50 Hz	1.9 VA
• at 60 Hz	2 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.86
• at 60 Hz	0.82
closing power of magnet coil at DC	5.9 W
holding power of magnet coil at DC	1.4 W
closing delay	
• at AC	50 80 ms
• at DC	50 80 ms

opening delay	
• at AC	30 50 ms
• at DC	30 50 ms
arcing time	10 10 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous	1
contact	
number of NO contacts for auxiliary contacts instantaneous 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
• at 60 V rated value	6 A
• at 110 V rated value	3 A
• at 125 V rated value	2 A
• at 220 V rated value	1A
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
design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V	C characteristic: 10 A; 0.4 kA
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 	7.6 A
at 600 V rated value	9 A
yielded mechanical performance [hp]	
for single-phase AC motor	
— at 110/120 V rated value	1 hp
— at 230 V rated value	1 hp
• for 3-phase AC motor	
— at 200/208 V rated value	2 hp
— at 220/230 V rated value	3 hp
— at 460/480 V rated value	5 hp
— at 575/600 V rated value	7.5 hp
contact rating of auxiliary contacts according to UL	A600 / P600
Short-circuit protection	
design of the fuse link	
for short-circuit protection of the main circuit with type of coordination 1 required.	aC: 62A (600V 100kA) aM: 22A (600V 100kA) DC00; 62A (445V 00kA)
— with type of coordination 1 required	gG: 63A (690V,100kA), aM: 32A (690V,100kA), BS88: 63A (415V,80kA)
— with type of assignment 2 required	gG: 25A (690V,100kA), aM: 20A (690V,100kA), BS88: 25A (415V,80kA)
for short-circuit protection of the auxiliary switch required Installation/mounting/dimensions	gG: 10 A (500 V, 1 kA)
Installation/ mounting/ dimensions	1/4000
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
fastening method side-by-side mounting	Yes
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
height	85 mm
width	45 mm

required spacing with side-by-yide mounting - forwards - upwards - at the side - forwards - or mands - at the side - forwards - upwards - forwards - upwards - to mands - at the side - downwards - forwards - forwar	depth	107 mm
with side-by-side mounting — forwards — upwards — at the side — or downwards — at the side — or grounded parts — upwards — or grounded parts — upwards — or forwards — upwards — or forwards — or forwards — or forwards — at the side — downwards — or forwards — or or auxiliary and control diresist — or or auxiliary and control diresist — or or auxiliary or or auxiliary contacts — or or auxiliary or or auxiliary contacts — or forwards —	<u> </u>	
- upwards	with side-by-side mounting	
Commands	— forwards	10 mm
at the side • for grounded parts towards upwards at the side downwards • for live parts forwards	— upwards	10 mm
• for grounded parts - forwards - unwards - at the side - downwards - forwards - forwards - forwards - forwards - unwards - at the side - downwards - unwards - at the side - forwards - the side - forwards - unwards - the side - formand cornect circuit - for auxiliary and control circuit - for auxiliary and control circuit - for main cornect circuit - for main contacts - for main contacts - solid - solid or stranded - finely stranded with core end processing - finely stranded with core end proce	— downwards	10 mm
Forwards	— at the side	0 mm
- upwards	for grounded parts	
at the side downwards downwards downwards downwards forwards forwards forwards forwards downwards downwards at the side downwards at the side downwards at the side downwards downwards downwards at the side downwards downwards downwards downwards downwards downwards downwards downwards downwards side downwards downwards downwards downwards side downwards screw-type terminals downwards downward	— forwards	10 mm
• for Ive parts - forwards - upwards - upwards - downwards - downwards - at the side - for auxiliary and control circuit - of auxiliary and control circuit - at contactor for sustiliary contacts - of auxiliary and control circuit - at contactor for sustiliary contacts - solid - solid or stranded - solid or stranded - solid or stranded - finely stranded with core and processing - finely stranded with core end processing - finely stranded with core end processing - solid or stranded - sinely stranded with core end process	— upwards	10 mm
• for live parts - forwards - wywards - downwards - downwards - at the side Connections/ Terminals Type of electrical connection • for main current circuit • for auxiliary and control circuit • for auxiliary and control circuit • for for auxiliary contacts • of magnet coil Screw-type terminals Screw-type terminals Screw-type terminals Screw-type terminals Screw-type terminals • for main contacts • of onemectable conductor cross-sections • for main contacts - solid - solid or stranded - finely stranded with core end processing • for AWG cables for main contacts • solid • sinded • finely stranded with core end processing • for ownectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing • for fawGG conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - fin	— at the side	6 mm
forwards upwards	— downwards	10 mm
upwards downwards down	• for live parts	
- downwards — at the side 6 mm Connections' Terminals type of electrical connection • for main current circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts — solid — solid or stranded — inely stranded with core end processing • for AWC cables for main contacts • solid • stranded • inely stranded with core end processing • for favior cables for main contacts • solid • stranded • inely stranded with core end processing • for AWC cables for main contacts • solid • stranded • inely stranded with core end processing • for avxiliary contacts • solid or stranded • finely stranded with core end processing • for avxiliary contacts • solid or stranded • inely stranded with core end processing • for avxiliary contacts • solid or stranded • finely stranded with core end processing • for avxiliary contacts • solid or stranded — finely stranded with core end processing • for avxiliary contacts • solid or stranded — finely stranded with core end processing • for avxiliary contacts • for auxiliary contacts • for auxil	— forwards	10 mm
- at the side Connections/ Terminals Vippe of electrical connection • for main current circuit • for auxiliary and control circuit • for auxiliary and control circuit • for auxiliary contacts • of magnet coil Vipe of connectable conductor cross-sections • for main contacts — solid — solid or stranded — finely stranded with core end processing • for AVVC cables for main contacts • solid • stranded • finely stranded with core end processing • for auxiliary contacts • solid • stranded • finely stranded with core end processing • for auxiliary contacts • solid • stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for faviliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for faviliary contacts • for successing • for auxiliary contacts • for successing • for auxiliary contacts • for successing • for successing • for successing • for faviliary contacts • for successing • for successing • for faviliary contacts • for successing • for auxiliary contacts • for successing • for auxiliary contacts • for successing • for faviliary contacts • for auxiliary contacts • for successing • for faviliary contacts • for auxiliary contacts	— upwards	10 mm
type of electrical connection of or main current circuit of or auxiliary and control circuit of a contactor for auxiliary contacts of magnet coll type of connectable conductor cross-sections of or main contacts — solid — solid or stranded — innely stranded with core end processing of or AVC cables for main contacts osloid — stranded of innely stranded with core end processing of innely stranded with core end processing of stranded of innely stranded with core end processing one connectable conductor cross-section for auxiliary contacts osloid of innely stranded with core end processing of innely stranded with core end processing of one auxiliary contacts of our auxiliary contacts of or auxiliary contacts of our au	— downwards	10 mm
type of electrical connection • for main current circuit • at contactor for auxiliary contacts • at contactor for auxiliary contacts • of main contacts • of main contacts • of main contacts • solid — solid or stranded — finely stranded with core end processing • sindy stranded with core end processing • solid or stranded • sinely stranded with core end processing • solid or stranded • finely stranded with core end processing • for AVKC cables for auxiliary contacts • solid or stranded • finely stranded with core end processing • for avxiliary contacts • solid or stranded • finely stranded with core end processing • for avxiliary contacts • solid or stranded • finely stranded with core end processing • for avxiliary contacts • solid or stranded • finely stranded with core end processing • for avxiliary contacts • solid or stranded • finely stranded with core end processing • for avxiliary contacts • solid or stranded • finely stranded with core end processing • for avxiliary contacts • solid or stranded • finely stranded with core end processing • for avxiliary contacts • solid or stranded • finely stranded with core end processing • for avxiliary contacts • solid or stranded • finely stranded with core end processing • for avxiliary contacts • solid or stranded • finely stranded with core end processing • for avxiliary contacts • solid or stranded • finely stranded with core end processing • for avxiliary contacts • solid or stranded • finely stranded with core end processing • for avxiliary contacts • for avxiliary contacts • for avxili	— at the side	6 mm
of or main current circuit of ra auxiliary and control circuit of ra auxiliary contacts of magnet coil Screw-type terminals Screw-type terminals Screw-type terminals Screw-type terminals Screw-type terminals Screw-t		
of or auxiliary and control circuit of or auxiliary contacts of magnet coil type of connectable conductor cross-sections of main contacts — solid or stranded — solid or stranded — finely stranded with core end processing of AWG cables for main contacts onnectable conductor cross-section for main contacts onlid of stranded of the stranded of the stranded with core end processing of for auxiliary contacts onlid or stranded of finely stranded with core end processing of or auxiliary contacts one solid or stranded of main contacts of or auxiliary contacts of auxiliary contacts of or with core end processing of for AWG cables for auxiliary contacts one contact according to IEC 60947-4-1 opositively driven operation according to IEC 60947-5-1 opositively driven operation according to SN 31920 opositively driven operation according to SN 31920		
at contactor for auxiliary contacts of magnet coil Screw-type terminals for main contacts a solid a solid a solid or stranded a finely stranded with core end processing for AWG cables for main contacts a solid a stranded a finely stranded with core end processing b for AWG cables for main contacts a solid a finely stranded with core end processing b for AWG cables for main contacts a solid a finely stranded with core end processing connectable conductor cross-section for main contacts a solid or stranded a finely stranded with core end processing connectable conductor cross-section for auxiliary contacts a solid or stranded a finely stranded with core end processing connectable conductor cross-sections a for auxiliary contacts a solid or stranded a finely stranded with core end processing b for auxiliary contacts a solid or stranded a finely stranded with core end processing b for auxiliary contacts a solid or stranded a finely stranded with core end processing b for auxiliary contacts a solid or stranded a finely stranded with core end processing b for auxiliary contacts a solid or stranded a finely stranded with core end processing b for auxiliary contacts a solid or stranded a finely stranded with core end processing b for auxiliary contacts a solid or stranded b finely stranded with core end processing b for auxiliary contacts a solid or stranded a finely stranded with core end processing b for auxiliary contacts a solid or stranded a finely stranded with core end processing b for auxiliary contacts a solid or stranded b finely stranded with core end processing b for auxiliary contacts a connectable conductor cross-sections a for auxiliary contacts b for auxiliary contacts b for auxiliary contacts b for auxiliary contacts b for auxiliary contacts c for auxiliary contacts b for auxiliary contacts c for auxiliary contacts c for auxiliary contacts c for auxiliary contacts b for auxiliary contacts c for auxiliary contacts c for auxiliary contact		
• of magnet coil type of connectable conductor cross-sections • for main contacts — solid — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts • solid • stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for suxiliary contacts • for auxiliary contacts • for suxiliary con	•	
type of connectable conductor cross-sections • for main contacts — solid — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts • solid • stranded • finely stranded with core end processing • for aWG cables for main contacts • solid • stranded • finely stranded with core end processing • for awg stranded • finely stranded with core end processing • for awg solid or stranded • finely stranded with core end processing • for awgiliary contacts • solid or stranded • finely stranded with core end processing • for awgiliary contacts • for awgiliary contacts • for awgiliary contacts • solid or stranded • finely stranded with core end processing • for awgiliary contacts • for awgiliary contacts • for for awgiliary contacts • for awgiliary contacts • for awgiliary contacts • for awgiliary contacts • for main contacts • for main contacts • for main contacts • for awgiliary	•	
• for main contacts - solid - solid or stranded - solid or stranded - finely stranded with core end processing • for AWG cables for main contacts - solid - stranded vith core end processing - for AWG cables for main contacts - solid - stranded - finely stranded with core end processing - stranded - stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end p	<u> </u>	Screw-type terminals
solid or stranded		
solid or stranded finely stranded with core end processing for AWG cables for main contacts solid or stranded finely stranded with core end processing solid or stranded finely stranded		0 (4 0.52) 0 (0.5 402)
- finely stranded with core end processing • for AWG cables for main contacts connectable conductor cross-section for main contacts • solid • stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts • for AWG cables for auxiliary contacts • for for AWG cables for auxiliary contacts • for for safety function • mirror contact according to IEC 60947-4-1 • positively driven operation according to IEC 60947-5-1 • suitable for safety function • mirror contact according to IEC 60947-4-1 • positively driven operation according to IEC 60947-5-1 • suitablity for use safety-related switching OFF yes service life maximum 20 a test wear-related service life necessary proportion of dangerous failures • with low demand rate according to SN 31920 • with high 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 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920		
• for AWG cables for main contacts connectable conductor cross-section for main contacts • solid • stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts 20 14 Safety related data product function • mirror contact according to IEC 60947-5-1 • positively driven operation according to IEC 60947-5-1 • suitable for safety function ves suitability for use safety-related switching OFF yes service life maximum 20 a test wear-related service life necessary 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 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920		
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• for main contacts • for auxiliary contacts • for auxiliary contacts 20 14 Safety related data product function • mirror contact according to IEC 60947-4-1 • positively driven operation according to IEC 60947-5-1 • suitable for safety function • suitablility for use safety-related switching OFF yes service life maximum 20 a test wear-related service life necessary proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 100 FIT	for AWG cables for auxiliary contacts	2x (20 16), 2x (18 14)
for main contacts		
for auxiliary contacts Safety related data product function mirror contact according to IEC 60947-4-1 positively driven operation according to IEC 60947-5-1 suitable for safety function suitability for use safety-related switching OFF service life maximum 20 a test wear-related service life necessary proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 suitable for safety function Yes service life maximum 20 a test wear-related service life necessary Yes proportion of dangerous failures with low demand rate according to SN 31920 suitable for safety function Yes service life maximum 20 a test wear-related service life necessary Yes proportion of dangerous failures with low demand rate according to SN 31920 1000 000 failure rate [FIT] with low demand rate according to SN 100 FIT		16 8
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test wear-related service life necessary proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 100 FIT	suitability for use safety-related switching OFF	Yes
proportion of dangerous failures ■ with low demand rate according to SN 31920 ■ with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 100 FIT	service life maximum	20 a
 with low demand rate according to SN 31920 with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 100 FIT 	test wear-related service life necessary	Yes
● with high demand rate according to SN 31920 73 % B10 value with high demand rate according to SN 31920 1 000 000 failure rate [FIT] with low demand rate according to SN 100 FIT	proportion of dangerous failures	
B10 value with high demand rate according to SN 31920 1 000 000 failure rate [FIT] with low demand rate according to SN 100 FIT	-	
failure rate [FIT] with low demand rate according to SN 100 FIT		
51920	failure rate [FIT] with low demand rate according to SN 31920	100 FII
ISO 13849		
device type according to ISO 13849-1 3		3

overdimensioning according to ISO 13849-2 necessary	Yes
IEC 61508	
safety device type according to IEC 61508-2	Type A
Electrical Safety	
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
Approvals Certificates	
General Product Approval	







Confirmation



KC

General Product Approval

EMV

Test Certificates

Marine / Shipping





Special Test Certific-<u>ate</u>

Type Test Certificates/Test Report





Marine / Shipping











Miscellaneous

other

Confirmation

Railway

Dangerous goods

Environment

Special Test Certificate

Transport Information



Environmental Con-firmations

Further information

Information on the packaging

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

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2023-1NB30

Cax online generator

t.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2023-1NB30

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2023-1NB30

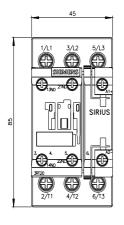
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

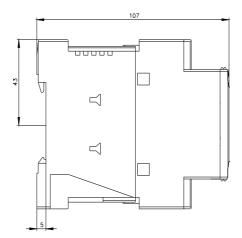
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2023-1NB30&lang=en

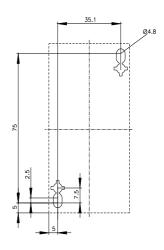
Characteristic: Tripping characteristics, I2t, Let-through current

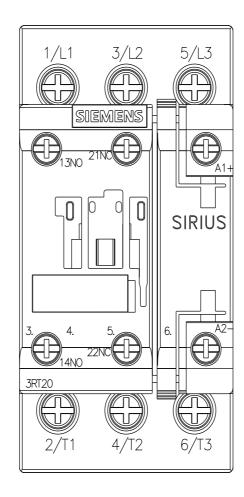
Further characteristics (e.g. electrical endurance, switching frequency)

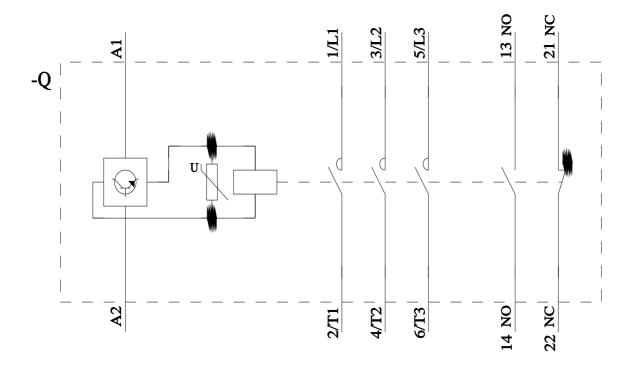
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2023-1NB30&objecttype=14&gridview=view1











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