3RT2025-1AP00-1AA0

Data sheet



power contactor, AC-3e/AC-3, 17 A, 7.5 kW / 400 V, 3-pole, 230 V AC, 50 Hz, auxiliary contacts: 1 NO + 1 NC, screw terminal, size: S0, upright mounting position

product designation 970 product type designation 9872 Size of contactor 90 product extension 4 unit module for communication 50 product extension 50 product extension 60 product extension 70 produc	product brand name	SIRIUS
product type designation 3RT2 General technical data size of contactor Size of contactor No. - function module for communication + vesses and some size of contactor system of the current + at AC in hot operating state + at AC in hot operating state per pole + of main circuit with degree of pollution 3 rated value + of auxiliary circuit with degree of pollution 3 rated value + of auxiliary circuit with degree of pollution 3 rated value + of auxiliary circuit with degree of pollution 3 rated value + of auxiliary circuit with degree of pollution 3 rated value + of auxiliary circuit with degree of pollution 3 rated value + of auxiliary circuit rated value + of auxiliary cir		
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product extension • function module for communication • auxilliary switch power loss [W] for rated value of the current • at AC in hot operating state 1.8 W • at AC in hot operating state per pole 0.6 W • without load current share typical 7.6 W Insulation voltage • of main circuit with degree of pollution 3 rated value 680 V • of auxiliary circuit with degree of pollution 3 rated value 680 V • of main circuit rated value 6 kV • of auxiliary circuit with degree of pollution 3 rated value 6 kV • of auxiliary circuit value 6 kV • of auxiliary switch sine pulse • at AC 7,5g / 5 ms, 4,7g / 10 ms mechanical service life (operating cycles) • of ontactor with added electronically optimized auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 5 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block typical 10 000 000 • of the contactor with added auxiliary switch block ty	General technical data	
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at AC in hot operating state per pole at AC in hot operating state per pole without load current share typical of main circuit with degree of pollution 3 rated value of auxillary circuit with degree of pollution 3 rated value of auxillary circuit with degree of pollution 3 rated value of auxillary circuit with degree of pollution 3 rated value of main circuit rated value of main circuit rated value of auxillary circuit rated value of at AC of contactor with sine pulse of the contactor with sine pulse of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with added auxillary switch block typical of the contactor with	auxiliary switch	Yes
at AC in hot operating state per pole without load current share typical without load current share typical finsulation voltage of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit rated value of main circuit rated value of auxiliary circuit rated value of at AC of auxiliary circuit rated value of the contactor with sine pulse of the contactor typical of the contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added electronically optimized auxiliary	power loss [W] for rated value of the current	
insulation voltage of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of main circuit rated value of main circuit rated value of main circuit rated value of auxiliary circuit rated value of the contactor with sine pulse of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typ	 at AC in hot operating state 	1.8 W
insulation voltage of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value 690 V surge voltage resistance of main circuit rated value 680 V of auxiliary circuit rated value 6 kV naximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse ot AC 7,5g / 5 ms, 4,7g / 10 ms shock resistance with sine pulse of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to EC 81346-2 Qu Substance Prohibitance (Date) Arnbient conditions installation altitude at height above sea level maximum abient temperature of during storage of elative humidity minimum 10 % relative humidity minimum 10 Main circuit Main circuit Main circuit 690 V 690 V 690 V 690 V 690 V 690 V 68V 400 V 610 V	 at AC in hot operating state per pole 	0.6 W
of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value surge voltage resistance of main circuit rated value of auxiliary circuit rated value of kV maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse ot AC of 5,5 / 5 ms. 4,7g / 10 ms shock resistance with sine pulse of contactor life (operating cycles) of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical	 without load current share typical 	7.6 W
of auxiliary circuit with degree of pollution 3 rated value surge voltage resistance of main circuit rated value of of auxiliary circuit rated value of auxiliary circuit rated value of of auxiliary circuit rated value of of auxiliary circuit rated value of of auxiliary circuit rated value of the contact according to EN 60947-1 shock resistance at rectangular impulse of at AC of sontactor typical of the contactor with sine pulse of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical	insulation voltage	
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of main circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of kV maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse oat AC 7,5g / 5 ms, 4,7g / 10 ms shock resistance with sine pulse oat AC 11,8g / 5 ms, 7,4g / 10 ms mechanical service life (operating cycles) of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contact	 of auxiliary circuit with degree of pollution 3 rated value 	690 V
of auxiliary circuit rated value maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse	surge voltage resistance	
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse • at AC • at AC **T,5g / 5 ms, 4,7g / 10 ms shock resistance with sine pulse • at AC **T,5g / 5 ms, 4,7g / 10 ms **Technical service life (operating cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the	of main circuit rated value	6 kV
shock resistance at rectangular impulse • at AC shock resistance with sine pulse • at AC 11,8g / 5 ms, 4,7g / 10 ms mechanical service life (operating cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxi	of auxiliary circuit rated value	6 kV
at AC shock resistance with sine pulse at AC 11,8g / 5 ms, 4,7g / 10 ms mechanical service life (operating cycles) of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor typical of the conta		400 V
shock resistance with sine pulse at AC at	shock resistance at rectangular impulse	
at AC mechanical service life (operating cycles) of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation of the contactor with added auxiliary switch block typical 10 000 000 10 000 000 20 000 10 000 000 10 000 000 10 000 00	• at AC	7,5g / 5 ms, 4,7g / 10 ms
mechanical service life (operating cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature • during operation • during storage -55 +80 °C relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit	shock resistance with sine pulse	
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of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature oduring operation oduring storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit 5 000 000 10 000 000 Q Q 2000 m 10 001/2009 Ambient conditions 2 000 m 2 000 m 2 000 m 3 000 000 10 000 000 10 000 000 10 000 00	mechanical service life (operating cycles)	
auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit 10 000 000 10 0	 of contactor typical 	10 000 000
reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit		5 000 000
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit	 of the contactor with added auxiliary switch block typical 	10 000 000
installation altitude at height above sea level maximum ambient temperature during operation during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit 2 000 m -25 +60 °C -25 +80 °C 10 % 95 %	reference code according to IEC 81346-2	Q
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ambient temperature • during operation • during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit	Ambient conditions	
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• during storage relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit	ambient temperature	
relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 g5 % maximum Main circuit	 during operation 	-25 +60 °C
relative humidity at 55 °C according to IEC 60068-2-30 95 % maximum Main circuit	during storage	-55 +80 °C
maximum Main circuit	relative humidity minimum	10 %
		95 %
number of poles for main current circuit 3	Main circuit	
	number of poles for main current circuit	3

number of NO contacts for main contacts	3
operating voltage	
 at AC-3 rated value maximum 	690 V
at AC-3e rated value maximum	690 V
operational current	
 at AC-1 at 400 V at ambient temperature 40 °C rated 	40 A
value	
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated	40 A
value	25.4
 up to 690 V at ambient temperature 60 °C rated value 	35 A
• at AC-3	
— at 400 V rated value	17 A
— at 500 V rated value	17 A
— at 690 V rated value	13 A
• at AC-3e	
— at 400 V rated value	17 A
— at 500 V rated value	17 A
— at 690 V rated value	13 A
at AC-4 at 400 V rated value	15.5 A
• at AC-5a up to 690 V rated value	35.2 A
• at AC-5a up to 690 V rated value • at AC-5b up to 400 V rated value	14.1 A
•	14.1 A
• at AC-6a	44.4.0
— up to 230 V for current peak value n=20 rated value	11.4 A
— up to 400 V for current peak value n=20 rated value	11.4 A
— up to 500 V for current peak value n=20 rated value	11.4 A
— up to 690 V for current peak value n=20 rated value	11.3 A
• at AC-6a	
 up to 230 V for current peak value n=30 rated value 	7.6 A
 up to 400 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	7.6 A
minimum cross-section in main circuit at maximum AC-1 rated	10 mm²
value	
operational current for approx. 200000 operating cycles at AC-4	
at 400 V rated value	7.7 A
at 690 V rated value	7.7 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	1A
— at 440 V rated value	0.4 A
— at 440 V rated value — at 600 V rated value	0.25 A
	0.25 A
with 2 current paths in series at DC-1 at 24 V roted value.	25 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	5 A
— at 440 V rated value	1 A
— at 600 V rated value	0.8 A
with 3 current paths in series at DC-1	
— at 24 V rated value	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 \/ rated value	20. 4
— at 24 V rated value	20 A
— at 60 V rated value	5 A
— at 220 V rated value	1.4
— 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 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	7.5 kW
• at AC-3	
— at 230 V rated value	4 kW
— at 400 V rated value	7.5 kW
— at 500 V rated value	7.5 kW
— at 690 V rated value	11 kW
• at AC-3e	
— at 230 V rated value	4 kW
— at 400 V rated value	4.5 kW
— at 500 V rated value	7.5 kW
— at 690 V rated value	11 kW
operating power for approx. 200000 operating cycles at AC-	
4	
 at 400 V rated value 	3.5 kW
at 690 V rated value	6 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 	9.9 kVA
 up to 690 V for current peak value n=20 rated value 	13.6 kVA
operating apparent newer at AC 6a	
operating apparent power at AC-6a	
up to 230 V for current peak value n=30 rated value	3 kVA
	3 kVA 5.2 kVA
• up to 230 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 	5.2 kVA
 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 	5.2 kVA 6.6 kVA
 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 	5.2 kVA 6.6 kVA
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	5.2 kVA 6.6 kVA
 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 	5.2 kVA 6.6 kVA 9.1 kVA
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 Ilmited to 1 s switching at zero current maximum	5.2 kVA 6.6 kVA 9.1 kVA 225 A; Use minimum cross-section acc. to AC-1 rated value
up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value 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	5.2 kVA 6.6 kVA 9.1 kVA 225 A; Use minimum cross-section acc. to AC-1 rated value 225 A; Use minimum cross-section acc. to AC-1 rated value
up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C Ilimited to 1 s switching at zero current maximum Ilimited to 10 s switching at zero current maximum	5.2 kVA 6.6 kVA 9.1 kVA 225 A; Use minimum cross-section acc. to AC-1 rated value 225 A; Use minimum cross-section acc. to AC-1 rated value 189 A; Use minimum cross-section acc. to AC-1 rated value
up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value 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	5.2 kVA 6.6 kVA 9.1 kVA 225 A; Use minimum cross-section acc. to AC-1 rated value 225 A; Use minimum cross-section acc. to AC-1 rated value 189 A; Use minimum cross-section acc. to AC-1 rated value 140 A; Use minimum cross-section acc. to AC-1 rated value
up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C Ilimited to 1 s switching at zero current maximum Ilimited to 5 s switching at zero current maximum Ilimited to 10 s switching at zero current maximum Ilimited to 30 s switching at zero current maximum Ilimited to 60 s switching at zero current maximum	5.2 kVA 6.6 kVA 9.1 kVA 225 A; Use minimum cross-section acc. to AC-1 rated value 225 A; Use minimum cross-section acc. to AC-1 rated value 189 A; Use minimum cross-section acc. to AC-1 rated value 140 A; Use minimum cross-section acc. to AC-1 rated value
up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value 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	5.2 kVA 6.6 kVA 9.1 kVA 225 A; Use minimum cross-section acc. to AC-1 rated value 225 A; Use minimum cross-section acc. to AC-1 rated value 189 A; Use minimum cross-section acc. to AC-1 rated value 140 A; Use minimum cross-section acc. to AC-1 rated value 115 A; Use minimum cross-section acc. to AC-1 rated value
up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C Ilimited to 1 s switching at zero current maximum Ilimited to 10 s switching at zero current maximum Ilimited to 30 s switching at zero current maximum Ilimited to 60 s switching at zero current maximum Ilimited to 60 s switching at zero current maximum a limited to 60 s switching at zero current maximum no-load switching frequency at AC	5.2 kVA 6.6 kVA 9.1 kVA 225 A; Use minimum cross-section acc. to AC-1 rated value 225 A; Use minimum cross-section acc. to AC-1 rated value 189 A; Use minimum cross-section acc. to AC-1 rated value 140 A; Use minimum cross-section acc. to AC-1 rated value 115 A; Use minimum cross-section acc. to AC-1 rated value
up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C Ilimited to 1 s switching at zero current maximum Ilimited to 10 s switching at zero current maximum Ilimited to 30 s switching at zero current maximum Ilimited to 60 s switching at zero current maximum a limited to 60 s switching at zero current maximum no-load switching frequency at AC operating frequency	5.2 kVA 6.6 kVA 9.1 kVA 225 A; Use minimum cross-section acc. to AC-1 rated value 225 A; Use minimum cross-section acc. to AC-1 rated value 189 A; Use minimum cross-section acc. to AC-1 rated value 140 A; Use minimum cross-section acc. to AC-1 rated value 115 A; Use minimum cross-section acc. to AC-1 rated value 5 000 1/h
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 Ilimited to 1 s switching at zero current maximum Ilimited to 5 s switching at zero current maximum Ilimited to 10 s switching at zero current maximum Ilimited to 30 s switching at zero current maximum Ilimited to 60 s switching at zero current maximum a limited to 60 s switching at zero current maximum no-load switching frequency at AC operating frequency at AC-1 maximum	5.2 kVA 6.6 kVA 9.1 kVA 225 A; Use minimum cross-section acc. to AC-1 rated value 225 A; Use minimum cross-section acc. to AC-1 rated value 189 A; Use minimum cross-section acc. to AC-1 rated value 140 A; Use minimum cross-section acc. to AC-1 rated value 115 A; Use minimum cross-section acc. to AC-1 rated value 15 000 1/h
up to 230 V for current peak value n=30 rated value up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value up to 690 V for current peak value n=30 rated value short-time withstand current in cold operating state up to 40 °C Ilimited to 1 s switching at zero current maximum Ilimited to 5 s switching at zero current maximum Ilimited to 10 s switching at zero current maximum Ilimited to 30 s switching at zero current maximum Ilimited to 60 s switching at zero current maximum ro-load switching frequency at AC operating frequency at AC-1 maximum at AC-2 maximum	5.2 kVA 6.6 kVA 9.1 kVA 225 A; Use minimum cross-section acc. to AC-1 rated value 225 A; Use minimum cross-section acc. to AC-1 rated value 189 A; Use minimum cross-section acc. to AC-1 rated value 140 A; Use minimum cross-section acc. to AC-1 rated value 115 A; Use minimum cross-section acc. to AC-1 rated value 5 000 1/h 1 000 1/h 1 000 1/h
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 Ilimited to 1 s switching at zero current maximum Ilimited to 5 s switching at zero current maximum Ilimited to 10 s switching at zero current maximum Ilimited to 30 s switching at zero current maximum Ilimited to 60 s switching at zero current maximum ro-load switching frequency at AC operating frequency at AC-1 maximum at AC-2 maximum at AC-3 maximum	5.2 kVA 6.6 kVA 9.1 kVA 225 A; Use minimum cross-section acc. to AC-1 rated value 225 A; Use minimum cross-section acc. to AC-1 rated value 189 A; Use minimum cross-section acc. to AC-1 rated value 140 A; Use minimum cross-section acc. to AC-1 rated value 115 A; Use minimum cross-section acc. to AC-1 rated value 5 000 1/h 1 000 1/h 1 000 1/h 1 000 1/h
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 Ilimited to 1 s switching at zero current maximum Ilimited to 10 s switching at zero current maximum Ilimited to 30 s switching at zero current maximum Ilimited to 60 s switching at zero current maximum Ilimited to 60 s switching at zero current maximum no-load switching frequency at AC operating frequency at AC-1 maximum at AC-3 maximum	5.2 kVA 6.6 kVA 9.1 kVA 225 A; Use minimum cross-section acc. to AC-1 rated value 225 A; Use minimum cross-section acc. to AC-1 rated value 189 A; Use minimum cross-section acc. to AC-1 rated value 140 A; Use minimum cross-section acc. to AC-1 rated value 115 A; Use minimum cross-section acc. to AC-1 rated value 5 000 1/h 1 000 1/h 1 000 1/h 1 000 1/h 1 000 1/h

type of voltage of the control supply voltage	AC
control supply voltage at AC	10
at 50 Hz rated value	230 V
operating range factor control supply voltage rated value of magnet coil at AC	200 1
• at 50 Hz	0.8 1.1
apparent pick-up power of magnet coil at AC	
• at 50 Hz	65 VA
inductive power factor with closing power of the coil	
● at 50 Hz	0.82
apparent holding power of magnet coil at AC	
● at 50 Hz	7.6 VA
inductive power factor with the holding power of the coil	
● at 50 Hz	0.25
closing delay	
• at AC	8 40 ms
opening delay	
• at AC	4 16 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 contact	1
number of NO contacts for auxiliary contacts instantaneous contact	1
operational current at AC-12 maximum	10 A
operational current at AC-15	
at 230 V rated value	10 A
at 400 V rated value	3 A
at 500 V rated value	2 A
at 690 V rated value	1A
operational current at DC-12	40.4
at 24 V rated valueat 48 V rated value	10 A 6 A
at 60 V rated value at 60 V rated value	6 A
at 110 V rated value 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
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	14 A
at 600 V rated value	17 A
yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V rated value	1 hp
— at 230 V rated value	3 hp
• for 3-phase AC motor	
— at 200/208 V rated value	3 hp
— at 220/230 V rated value	5 hp
— at 460/480 V rated value	10 hp
— at 575/600 V rated value	15 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 	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	gG: 10 A (500 V, 1 kA)
nstallation/ mounting/ dimensions	
mounting position	standing, on horizontal mounting surface
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
side-by-side mounting	Yes
height	85 mm
width	45 mm
depth	97 mm
required spacing	
 with side-by-side mounting 	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
 for grounded parts 	
— forwards	10 mm
— upwards	10 mm
— at the side	6 mm
— downwards	10 mm
for live parts	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	6 mm
Connections/ Terminals	
type of electrical connection	
for main current circuit	screw-type terminals
 for auxiliary and control circuit 	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	
• solid	2x (1 2.5 mm²), 2x (2.5 10 mm²)
solid or stranded	2x (1 2.5 mm²), 2x (2.5 10 mm²)
finely stranded with core end processing	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
connectable conductor cross-section for main contacts	
• solid	1 10 mm²
• stranded	1 10 mm²
finely stranded with core end processing	1 10 mm²
• finely stranded with core end processing connectable conductor cross-section for auxiliary contacts	1 10 mm²
· · · · · · · · · · · · · · · · · · ·	1 10 mm² 0.5 2.5 mm²
connectable conductor cross-section for auxiliary contacts	
connectable conductor cross-section for auxiliary contacts • solid or stranded	0.5 2.5 mm²
connectable conductor cross-section for auxiliary contacts	0.5 2.5 mm²
connectable conductor cross-section for auxiliary contacts	0.5 2.5 mm²
connectable conductor cross-section for auxiliary contacts	0.5 2.5 mm² 0.5 2.5 mm²
connectable conductor cross-section for auxiliary contacts	0.5 2.5 mm ² 0.5 2.5 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²)
connectable conductor cross-section for auxiliary contacts	0.5 2.5 mm ² 0.5 2.5 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²)
connectable conductor cross-section for auxiliary contacts	0.5 2.5 mm ² 0.5 2.5 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²)
connectable conductor cross-section for auxiliary contacts	0.5 2.5 mm ² 0.5 2.5 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (20 16), 2x (18 14)
connectable conductor cross-section for auxiliary contacts	0.5 2.5 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (20 16), 2x (18 14)
connectable conductor cross-section for auxiliary contacts	0.5 2.5 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (20 16), 2x (18 14)
connectable conductor cross-section for auxiliary contacts	0.5 2.5 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (20 16), 2x (18 14)
connectable conductor cross-section for auxiliary contacts	0.5 2.5 mm ² 0.5 2.5 mm ² 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²) 2x (20 16), 2x (18 14)

 with low demand rate according to SN 31920 	40 %
 with high demand rate according to SN 31920 	73 %
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
T1 value for proof test interval or service life according to IEC 61508	20 a
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
suitability for use	
 safety-related switching OFF 	Yes
0-45-4-1	

Certificates/ approvals

General Product Approval



Confirmation





KC



Functional EMC Safety/Safety of Machinery

Declaration of Conformity

Test Certificates



Type Examination Certificate





Type Test Certificates/Test Report

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

Marine / Shipping













Railway Environment other

Confirmation



Confirmation

Vibration and Shock

Environmental Confirmations

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

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

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

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

Information on the packaging

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

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

Industry Mall (Online ordering system)

 $\underline{https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2025-1AP00-1AA0}$

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2025-1AP00-1AA0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2025-1AP00-1AA0

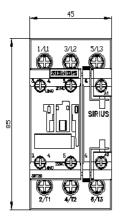
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2025-1AP00-1AA0&lang=en

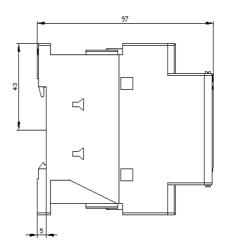
Characteristic: Tripping characteristics, I2t, Let-through current

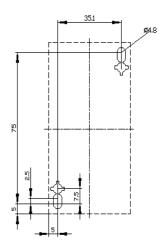
https://support.industry.siemens.com/cs/ww/en/ps/3RT2025-1AP00-1AA0/char

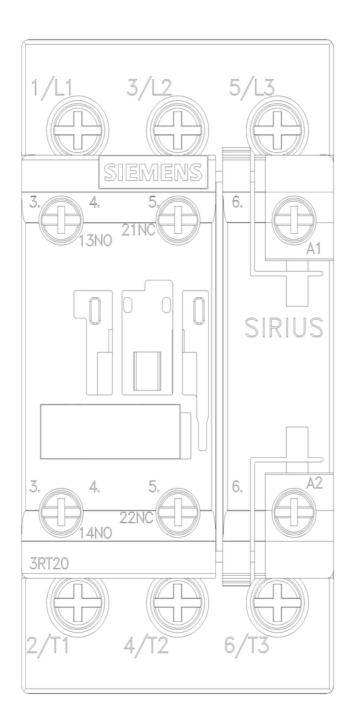
Further characteristics (e.g. electrical endurance, switching frequency)

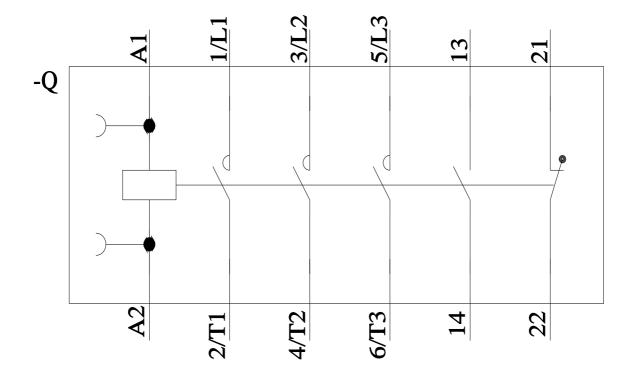
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2025-1AP00-1AA0&objecttype=14&gridview=view1











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