SIEMENS

Data sheet

3RT2025-2BF40



power contactor, AC-3e/AC-3, 17 A, 7.5 kW / 400 V, 3-pole, 110 V DC, auxiliary contacts: 1 NO + 1 NC, spring-loaded terminal, size: S0

product brand name SIRIUS product designation Power contactor product type designation 3RT2 General technical data size of contactor size of contactor S0 product extension • function module for communication • function module for communication No • auxiliary switch Yes power loss [W] for rated value of the current 0.6 W • at AC in hot operating state per pole 0.6 W • without load current share typical 5.9 W insulation voltage 690 V • of main circuit with degree of pollution 3 rated value 690 V
product type designation 3RT2 General technical data
General technical data size of contactor \$0 product extension \$0 • function module for communication No • auxiliary switch Yes power loss [W] for rated value of the current \$1.8 W • 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 \$5.9 W insulation voltage \$690 V
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 1.8 W • at AC in hot operating state per pole 0.6 W • without load current share typical 5.9 W insulation voltage 690 V
product extension No • function module for communication No • auxiliary switch Yes 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 5.9 W insulation voltage • of main circuit with degree of pollution 3 rated value 690 V
• function module for communicationNo• auxiliary switchYespower loss [W] for rated value of the current• at AC in hot operating state1.8 W• at AC in hot operating state per pole0.6 W• without load current share typical5.9 Winsulation voltage690 V
• auxiliary switch Yes power loss [W] for rated value of the current Image: Constraint 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 5.9 W insulation voltage 690 V
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 5.9 W insulation voltage 690 V
 at AC in hot operating state at AC in hot operating state per pole without load current share typical 5.9 W insulation voltage of main circuit with degree of pollution 3 rated value 690 V
• at AC in hot operating state per pole 0.6 W • without load current share typical 5.9 W insulation voltage 690 V
without load current share typical 5.9 W insulation voltage of main circuit with degree of pollution 3 rated value 690 V
insulation voltage 690 V
of main circuit with degree of pollution 3 rated value 690 V
e of auxiliany circuit with degree of pollution 3 rated value 600 V
• or advinery circuit with degree of politition 5 faced value 000 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 400 V coil and main contacts according to EN 60947-1
shock resistance at rectangular impulse
• at DC 10g / 5 ms, 7,5g / 10 ms
shock resistance with sine pulse
• 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 5 000 000 auxiliary switch block typical
of the contactor with added auxiliary switch block typical 10 000 000
reference code according to IEC 81346-2 Q
Substance Prohibitance (Date) 10/01/2009
Ambient conditions
installation altitude at height above sea level maximum 2 000 m
ambient temperature
• during operation -25 +60 °C
• during storage -55 +80 °C
relative humidity minimum 10 %
relative humidity at 55 °C according to IEC 60068-2-30 95 % maximum
Main circuit
number of poles for main current circuit 3

number of NO contacts for main contacts	3
operating voltage	5
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	
— 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-5b up to 400 V rated value	14.1 A
● at AC-6a	
— 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 value	10 mm ²
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	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 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 	

- all 24 Y raide Yaules 20 Å - all 10 Y raide Yaules 5 Å - att 20 Y raide Yaules 1 Å - all 440 Y raide Yaules 0.00 Å - att 20 Y raide Yaules 7.5 KW - att 20 Y raide Yaules 1.4 KW - att 20 Y raide Yaules 4.5 KW - att 20 Y raide Yaules 7.5 KW - att 20 Y rai		
	— at 24 V rated value	20 A
- al 220 Vieles value 0.06 A - al 400 Vieles value 0.06 A - al 60V Vieles value 36 A - al 60V Vieles value 0.06 A - al 60V Vieles value 0.07 A - al 60V vieles value 0.06 A - al 60V vieles value 7.5 kW		
• with 2 current paths in series at DC-3 at DC-5>- at 24 V rated value35 A- at 110 V rated value15 A- at 20 V rated value027 A- at 20 V rated value027 A- at 20 V rated value027 A- at 40 V rated value05 A- at 40 V rated value05 A- at 20 V rated value05 A- at 20 V rated value06 A- at 20 V rated value05 A- at 20 V rated value75 kW- at 20 V rated value35 kW- at 400 V rated value n=02 rated value36 kW- at 400 V rated value n=02 rated value35 kW- at 400 V for current pack value n=02 rated value36 kW- at 400 V rated value n=02 rated value36 kW- at 400 V for current pack value n=02 rated value36 kW- at 400 V for current pack value n=02 rated value36 kW- at 400 V for cure	— at 440 V rated value	
	— 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
• with 3 current paths in series at DC-3 at DC-59	— at 440 V rated value	0.27 A
	— at 600 V rated value	0.16 A
- af 80 Y rede value35 Å- af 10 V rede value35 Å- af 240 V rede value0.6 Å- af 240 V rede value0.6 Å- af 230 V rede value4 KW- af 230 V rede value7.5 KW- af 440 V rede value7.5 KW- af 400 V rede value8.5 KW- af 400 V rede value9.5 KW- af 400 V rede value n=20 rede value9.5 KW- af 400 V rede value n=20 rede value9.5 KW- af b 00 V for current pack value n=20 rede value7.6 KW- af 00 V for current pack value n=20 rede value9.5 KW- af 00 V for current pack value n=20 rede value5.2 KW- af 00 V for current pack value n=30 rede value5.2 KW- af 00 V for current pack value n=30 rede value5.2 KW- af 00 V for current pack value n=30 rede value5.2 KW- af 00 V for current pack value n=30 rede value5.2 K	 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
operating power at AC-3 at 230 V rated value At WV at 400 V rated value At 900 V for current pack value n=20 rated value At 900 V for current pack value n=20 rated value At 900 V for current pack value n=30 rated value At 900 V for current pack value n=30 rated value At 900 V for current p	— at 440 V rated value	0.6 A
• at AC-3• at ACO-3- at 230 V rated value7.5 kW- at 600 V rated value7.5 kW- at 600 V rated value7.5 kW- at 600 V rated value1 kW• at AC-3a at 230 V rated value4 kW- at 230 V rated value7.5 kW- at 600 V rated value8.6 kW- at 600 V rated value8.6 kW- at 600 V rated value5.6 kW- at 600 V rated value9.6 kW- at 600 V rated value9.8 kVA- at 600 V for current peak value n=20 rated value9.8 kVA- up to 500 V for current peak value n=20 rated value9.8 kVA- up to 500 V for current peak value n=20 rated value9.8 kVA- up to 500 V for current peak value n=30 rated value9.8 kVA- up to 500 V for current peak value n=30 rated value9.8 kVA- up to 500 V for current peak value n=30 rated value9.8 kVA- up to 500 V for current peak value n=30 rated value9.8 kVA- up to 500 V for current peak value n=30 rated value9.8 kVA- up to 500 V for current peak value n=30 rated value9.1 kVA- up to 500 V for current peak value n=30 rated value9.1 kVA- up to 500 V for current peak value n=30 rated value9.1 kVA- up	— at 600 V rated value	0.6 A
	operating power	
	• at AC-3	
	— at 230 V rated value	4 kW
	— at 400 V rated value	7.5 kW
• at AC-3e- at 230 V rated value4 kW- at 400 V rated value7.5 kW- at 680 V rated value7.5 kW- at 680 V rated value11 kWoperating power for approx. 200000 operating cycles at AC• at 400 V rated value3.5 kW• at 680 V rated value6 kW• operating apparent power at AC-63-• up to 230 V for current peak value n=20 rated value9.5 kVA• up to 500 V for current peak value n=20 rated value9.9 kVA• up to 500 V for current peak value n=20 rated value9.9 kVA• up to 500 V for current peak value n=20 rated value9.9 kVA• up to 500 V for current peak value n=20 rated value9.9 kVA• up to 500 V for current peak value n=20 rated value9.9 kVA• up to 500 V for current peak value n=20 rated value9.8 kVA• up to 500 V for current peak value n=30 rated value9.8 kVA• up to 500 V for current peak value n=30 rated value5.2 kVA• up to 500 V for current peak value n=30 rated value5.2 kVA• up to 500 V for current peak value n=30 rated value8.8 kVA• up to 500 V for current peak value n=30 rated value225 A; Use minimum cross-section acc. to AC-1 rated value• limited to 1s switching at zero current maximum189 A; Use minimum cross-section acc. to AC-1 rated value• limited to 50 switching at zero current maximum150 t/h• at DC1500 t/h• at DC1500 t/h• at DC1500 t/h• at DC1500 t/h• at AC-3 maximum1000 t/h </td <td>— at 500 V rated value</td> <td>7.5 kW</td>	— at 500 V rated value	7.5 kW
	— at 690 V rated value	11 kW
at 400 V rated value7.5 kW at 500 V rated value7.5 kW at 600 V rated value7.5 kW at 600 V rated value1 kWoperating power for approx. 200000 operating cycles at AC:4 at 400 V rated value3.5 kW at 600 V rated value6 kWoperating apparent power at AC-6a	• at AC-3e	
at 500 V rated value7.5 kW at 690 V rated value11 kWoperating power for approx. 20000 operating cycles at AC- 43.5 kW• at 400 V rated value3.5 kW• at 690 V rated value3.5 kW• at 690 V rated value3.5 kW• operating apparent power at AC-6a	— at 230 V rated value	4 kW
	— at 400 V rated value	7.5 kW
operating power for approx. 20000 operating cycles at AC-4 • at 400 V rated value • at 690 V rated value • at 690 V rated value • up to 230 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 500 V for current peak value n=20 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 500 V for current peak value n=30 rated value • up to 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 • 1000 f	— at 500 V rated value	7.5 kW
	— at 690 V rated value	11 kW
	operating power for approx. 200000 operating cycles at AC-	
• 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 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 9.9 kVA • up to 690 V for current peak value n=20 rated value 13.6 kVA operating apparent power at AC-6a - • up to 230 V for current peak value n=30 rated value 5.2 kVA • up to 500 V for current peak value n=30 rated value 6.6 kVA • up to 690 V for current peak value n=30 rated value 9.1 kVA • up to 690 V for current peak value n=30 rated value 9.1 kVA • up to 690 V for current peak value n=30 rated value 9.1 kVA • up to 690 V for current peak value n=30 rated value 9.1 kVA • up to 690 V for current peak value n=30 rated value 9.1 kVA • up to 690 V for current maximum 225 A; Use minimum cross-section acc. to AC-1 rated value • limited to 1 s switching at zero current maximum 189 A; Use minimum cross-section acc. to AC-1 rated value • limited to 30 s switching at zero current maximum 140 A; Use minimum cross-section acc. to AC-1 rated value • limited to 10 s switching at zero current maximum 150 U h <td></td> <td></td>		
operating apparent power at AC-6a 4.5 kVA • up to 230 V for current peak value n=20 rated value 4.5 kVA • up to 500 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 500 V for current peak value n=20 rated value 9.9 kVA • up to 500 V for current peak value n=20 rated value 13.6 kVA operating apparent power at AC-6a	• at 400 V rated value	3.5 kW
• 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 500 V for current peak value n=20 rated value 13.6 kVA operating apparent power at AC-6a	• at 690 V rated value	6 kW
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up to 230 V for current peak value n=30 rated value3 kVAup to 400 V for current peak value n=30 rated value5.2 kVAup to 500 V for current peak value n=30 rated value6.6 kVAup to 690 V for current peak value n=30 rated value9.1 kVAshort-time withstand current in cold operating state up to 40 °C225 A; Use minimum cross-section acc. to AC-1 rated valuee limited to 1 s switching at zero current maximum225 A; Use minimum cross-section acc. to AC-1 rated valuee limited to 1 s switching at zero current maximum189 A; Use minimum cross-section acc. to AC-1 rated valuee limited to 3 s switching at zero current maximum115 A; Use minimum cross-section acc. to AC-1 rated valuee limited to 6 s switching at zero current maximum115 A; Use minimum cross-section acc. to AC-1 rated valuee limited to 6 s switching at zero current maximum115 A; Use minimum cross-section acc. to AC-1 rated valuee limited to 6 s switching at zero current maximum115 A; Use minimum cross-section acc. to AC-1 rated valuee at DC1 500 1/hoperating frequency1 500 1/he at AC-1 maximum1 000 1/he at AC-1 maximum1 000 1/he at AC-3 maximum1 000 1/he at AC-3 maximum1 000 1/he at AC-3 maximum1 000 1/he at AC-4 maximum1 000 1/he at AC-4 maximum3 00 1/h	 up to 690 V for current peak value n=20 rated value 	13.6 kVA
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• up to 690 V for current peak value n=30 rated value9.1 kVAshort-time withstand current in cold operating state up to 40 °C9.1 kVA• limited to 1 s switching at zero current maximum225 A; Use minimum cross-section acc. to AC-1 rated value• limited to 5 s switching at zero current maximum225 A; Use minimum cross-section acc. to AC-1 rated value• limited to 10 s switching at zero current maximum189 A; Use minimum cross-section acc. to AC-1 rated value• limited to 30 s switching at zero current maximum140 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum140 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum140 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum15 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum140 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum140 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum15 Ot 1/h• at DC1 500 1/h• at AC-1 maximum1 000 1/h• at AC-2 maximum1 000 1/h• at AC-3 maximum300 1/h	 up to 400 V for current peak value n=30 rated value 	5.2 kVA
short-time withstand current in cold operating state up to 40 °C225 A; Use minimum cross-section acc. to AC-1 rated value• limited to 1 s switching at zero current maximum225 A; Use minimum cross-section acc. to AC-1 rated value• limited to 10 s switching at zero current maximum189 A; Use minimum cross-section acc. to AC-1 rated value• limited to 30 s switching at zero current maximum140 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum140 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum115 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum115 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum115 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum115 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum115 A; Use minimum cross-section acc. to AC-1 rated value• at DC1 500 1/h• at AC-1 maximum1 000 1/h• at AC-2 maximum1 000 1/h• at AC-3 maximum1 000 1/h• at AC-3 maximum1 000 1/h• at AC-3 maximum1 000 1/h• at AC-4 maximum300 1/h	 up to 500 V for current peak value n=30 rated value 	6.6 kVA
40 °C• limited to 1 s switching at zero current maximum225 A; Use minimum cross-section acc. to AC-1 rated value• limited to 5 s switching at zero current maximum225 A; Use minimum cross-section acc. to AC-1 rated value• limited to 10 s switching at zero current maximum189 A; Use minimum cross-section acc. to AC-1 rated value• limited to 30 s switching at zero current maximum140 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum115 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching frequency1 500 1/h• at DC1 500 1/h• at AC-1 maximum1 000 1/h• at AC-2 maximum1 000 1/h• at AC-3 maximum1 000 1/h• at AC-3 maximum1 000 1/h• at AC-4 maximum1 000 1/h• at AC-4 maximum300 1/h	• up to 690 V for current peak value n=30 rated value	9.1 kVA
• limited to 1 s switching at zero current maximum225 A; Use minimum cross-section acc. to AC-1 rated value• limited to 5 s switching at zero current maximum225 A; Use minimum cross-section acc. to AC-1 rated value• limited to 10 s switching at zero current maximum189 A; Use minimum cross-section acc. to AC-1 rated value• limited to 30 s switching at zero current maximum140 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum115 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum115 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching frequency1 500 1/h• at DC1 500 1/h• at AC-1 maximum1 000 1/h• at AC-2 maximum1 000 1/h• at AC-3 maximum1 000 1/h• at AC-3 maximum1 000 1/h• at AC-3 maximum1 000 1/h• at AC-4 maximum300 1/h		
Imited to 5 s switching at zero current maximum225 A; Use minimum cross-section acc. to AC-1 rated valueImited to 10 s switching at zero current maximum189 A; Use minimum cross-section acc. to AC-1 rated valueImited to 30 s switching at zero current maximum140 A; Use minimum cross-section acc. to AC-1 rated valueImited to 60 s switching at zero current maximum115 A; Use minimum cross-section acc. to AC-1 rated valueImited to 60 s switching frequency115 A; Use minimum cross-section acc. to AC-1 rated valueImited to 20 s switching frequency1 500 1/hImited to 20 s maximum1 500 1/hImited to 20 s maximum1 000 1/		
• limited to 10 s switching at zero current maximum189 A; Use minimum cross-section acc. to AC-1 rated value• limited to 30 s switching at zero current maximum140 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum115 A; Use minimum cross-section acc. to AC-1 rated value no-load switching frequency 115 A; Use minimum cross-section acc. to AC-1 rated value• at DC1 500 1/h• at AC-1 maximum1 000 1/h• at AC-2 maximum1 000 1/h• at AC-3 maximum1 000 1/h• at AC-3e maximum1 000 1/h• at AC-4 maximum300 1/h	 limited to 1 s switching at zero current maximum 	
• limited to 30 s switching at zero current maximum140 A; Use minimum cross-section acc. to AC-1 rated value• limited to 60 s switching at zero current maximum115 A; Use minimum cross-section acc. to AC-1 rated valueno-load switching frequency1500 1/h• at DC1 500 1/h• at AC-1 maximum1 000 1/h• at AC-2 maximum1 000 1/h• at AC-3 maximum1 000 1/h• at AC-3e maximum1 000 1/h• at AC-4 maximum300 1/h	 limited to 5 s switching at zero current maximum 	225 A; Use minimum cross-section acc. to AC-1 rated value
• limited to 60 s switching at zero current maximum115 A; Use minimum cross-section acc. to AC-1 rated valueno-load switching frequency1 500 1/h• at DC1 500 1/h• at AC-1 maximum1 000 1/h• at AC-2 maximum1 000 1/h• at AC-3 maximum1 000 1/h• at AC-3 maximum1 000 1/h• at AC-3 maximum300 1/h	 limited to 10 s switching at zero current maximum 	
no-load switching frequency1 500 1/h• at DC1 500 1/hoperating frequency-• at AC-1 maximum1 000 1/h• at AC-2 maximum1 000 1/h• at AC-3 maximum1 000 1/h• at AC-3e maximum1 000 1/h• at AC-3e maximum300 1/h	-	
• at DC 1 500 1/h operating frequency - • at AC-1 maximum 1 000 1/h • at AC-2 maximum 1 000 1/h • at AC-3 maximum 1 000 1/h • at AC-3 maximum 1 000 1/h • at AC-3e maximum 1 000 1/h • at AC-3e maximum 300 1/h		115 A; Use minimum cross-section acc. to AC-1 rated value
operating frequency1 000 1/h• at AC-1 maximum1 000 1/h• at AC-2 maximum1 000 1/h• at AC-3 maximum1 000 1/h• at AC-3e maximum1 000 1/h• at AC-4 maximum300 1/h	no-load switching frequency	
• at AC-1 maximum 1 000 1/h • at AC-2 maximum 1 000 1/h • at AC-3 maximum 1 000 1/h • at AC-3e maximum 1 000 1/h • at AC-3e maximum 1 000 1/h • at AC-4 maximum 300 1/h	• at DC	1 500 1/h
• at AC-2 maximum 1 000 1/h • at AC-3 maximum 1 000 1/h • at AC-3e maximum 1 000 1/h • at AC-4 maximum 300 1/h	operating frequency	
• at AC-3 maximum 1 000 1/h • at AC-3e maximum 1 000 1/h • at AC-4 maximum 300 1/h	• at AC-1 maximum	1 000 1/h
• at AC-3e maximum 1 000 1/h • at AC-4 maximum 300 1/h	• at AC-2 maximum	1 000 1/h
• at AC-4 maximum 300 1/h	• at AC-3 maximum	1 000 1/h
	• at AC-3e maximum	1 000 1/h
Control circuit/ Control	• at AC-4 maximum	300 1/h
	Control circuit/ Control	

type of voltage of the control supply voltage	DC
control supply voltage at DC	
rated value	110 V
operating range factor control supply voltage rated value of magnet coil at DC	
initial value	0.8
full-scale value	1.1
closing power of magnet coil at DC	5.9 W
holding power of magnet coil at DC	5.9 W
closing delay	
• at DC	50 170 ms
opening delay	
• at DC	15 18 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	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	1 A
• at 600 V rated value	0.15 A
operational current at DC-13	
• at 24 V rated value	10 A
• at 48 V rated value	2 A
• at 60 V rated value	2 A
• at 110 V rated value	1 A
• at 125 V rated value	0.9 A
at 220 V rated value	0.3 A
• at 600 V rated value	0.1 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	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)
1	

- with type of assignment 2 required

• for short-circuit protection of the auxiliary switch required

gG: 25A (690V,100kA), aM: 20A (690V,100kA), BS88: 25A (415V,80kA) gG: 10 A (500 V, 1 kA)

nstallation/ mounting/ dimensions			
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface		
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715		
 side-by-side mounting 	Yes		
height	102 mm		
width	45 mm		
depth	107 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	spring-loaded terminals		
for auxiliary and control circuit	spring-loaded terminals		
at contactor for auxiliary contacts	Spring-type terminals		
of magnet coil	Spring-type terminals		
type of connectable conductor cross-sections for main contacts			
solid	2x (1 10 mm²)		
solid solid or stranded	2x (1 10 mm ²)		
 finely stranded with core end processing 	2x (1 6 mm ²)		
finely stranded with core end processing finely stranded without core end processing	2x (1 6 mm ²)		
connectable conductor cross-section for main contacts	2A (1 0 mm)		
	1 10 mm ²		
• solid	1 10 mm ²		
stranded	1 10 mm ²		
finely stranded with core end processing	1 6 mm ²		
finely stranded without core end processing	1 6 mm ²		
connectable conductor cross-section for auxiliary contacts	$0.5 - 2.5 \text{ mm}^2$		
solid or stranded	0.5 2.5 mm ²		
finely stranded with core end processing	0.5 1.5 mm ²		
finely stranded without core end processing	0.5 2.5 mm²		
type of connectable conductor cross-sections			
for auxiliary contacts			
— solid or stranded	2x (0.5 2.5 mm ²)		
 finely stranded with core end processing 	2x (0.5 1.5 mm ²)		
— finely stranded without core end processing	2x (0.5 2.5 mm ²)		
for AWG cables for auxiliary contacts	2x (20 14)		
AWG number as coded connectable conductor cross section			
for main contacts	18 8		
 for auxiliary contacts 	20 14		
Safety related data			
product function			
moduct function mirror contact according to IEC 60947-4-1	Yes		
-	Yes		

proportion of danger					
		20	40 %		
 with low demand rate according to SN 31920 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 EC			20 a		
61508			20 0		
protection class IP o	n the front according to I				
touch protection on t	the front according to IEC	60529	finger-safe, for vertical contact	from the front	
Certificates/ approvals	i				
General Product App	proval				
		<u>Confirmation</u>		KC	EHC
EMC	Functional Safety/Safety of Ma- chinery	Declaration of C	conformity	Test Certificates	
RCM	<u>Type Examination Cer-</u> tificate	CE EG-Konf.	UK CA	<u>Type Test Certific-</u> ates/Test Report	Special Test Certific- ate
Marine / Shipping					
ABS	BUREAU VERITAS		Lloyd's Register uis	PRS	RINA
Marine / Shipping	other		Railway	Dangerous Good	Environment
KMRS RMRS	<u>Confirmation</u>		Vibration and Shock	Transport Information	Environmental Con- firmations
https://press.siemens.c	d to exit the Russian mark com/global/en/pressrelease on the renewal of the curr cal Siemens office on the s	ent EAC certificate		d to import or offer to supp	ly these products to an
EAC relevant market (Information on the pa https://support.industry	other than the sanctioned E ackaging y.siemens.com/cs/ww/en/vio vnloadcenter (Catalogs, E	EAEU member state ew/109813875	es Russia or Belarus).	<u></u>	
Industry Mall (Online					

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2025-2BF40

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2025-2BF40

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2025-2BF40

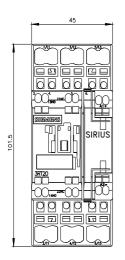
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

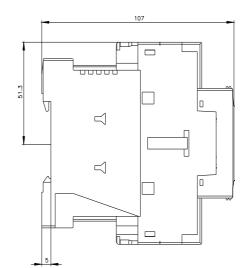
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2025-2BF40&lang=en

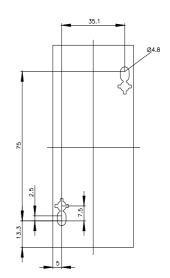
Characteristic: Tripping characteristics, I²t, Let-through current

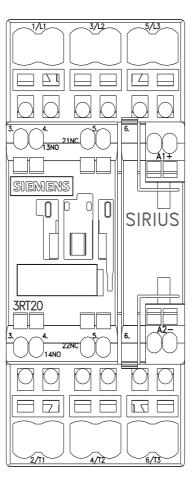
https://support.industry.siemens.com/cs/ww/en/ps/3RT202 -2BF40/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2025-2BF40&objecttype=14&gridview=view1

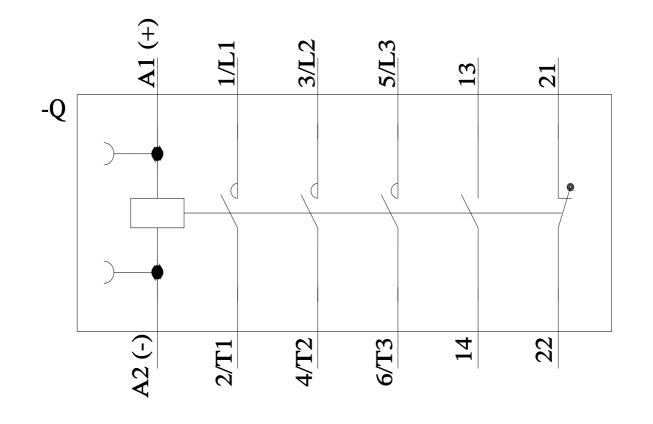








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