SIEMENS

Data sheet 3RT2015-1BN41



power contactor, AC-3e/AC-3, 7 A, 3 kW / 400 V, 3-pole, 250 V DC, auxiliary contacts: 1 NO, screw terminal, size: S00 $\,$

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S00
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 	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 DC	6,7g / 5 ms, 4,2g / 10 ms
shock resistance with sine pulse	
• at DC	10,5g / 5 ms, 6,6g / 10 ms
mechanical service life (operating cycles)	
of contactor typical	30 000 000
 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
Weight	0.3 kg
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
during operation	-25 +60 °C
during storage	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %

Environmental footprint	
Environmental Product Declaration(EPD)	Yes
global warming potential [CO2 eq] total	153 kg
global warming potential [CO2 eq] during manufacturing	1.42 kg
global warming potential [CO2 eq] during operation	152 kg
global warming potential [CO2 eq] after end of life	-0.305 kg
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 value at AC-1 	18 A
— up to 690 V at ambient temperature 40 °C rated value	18 A
— up to 690 V at ambient temperature 60 $^{\circ}\text{C}$ rated value	16 A
• at AC-3	
— at 400 V rated value	7 A
— at 500 V rated value	6 A
— at 690 V rated value	4.9 A
• at AC-3e	
— at 400 V rated value	7 A
— at 500 V rated value	6 A
— at 690 V rated value	4.9 A
• at AC-4 at 400 V rated value	6.5 A
at AC-5a up to 690 V rated value	15.8 A
at AC-5b up to 400 V rated value	5.8 A
• at AC-6a	4 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 	4 A
— up to 500 V for current peak value n=20 rated value	3.8 A
— up to 690 V for current peak value n=20 rated value	3.6 A
• at AC-6a	0.071
— up to 230 V for current peak value n=30 rated value	2.7 A
— up to 400 V for current peak value n=30 rated value	2.7 A
— up to 500 V for current peak value n=30 rated value	2.5 A
— up to 690 V for current peak value n=30 rated value	2.4 A
minimum cross-section in main circuit at maximum AC-1 rated	2.5 mm²
value operational current for approx. 200000 operating cycles at	
AC-4	26.4
at 600 V rated value at 600 V rated value	2.6 A
at 690 V rated value Operational current	1.8 A
operational current • at 1 current path at DC-1	
— at 24 V rated value	15 A
— at 60 V rated value	15 A
— at 110 V rated value	1.5 A
— at 220 V rated value	0.6 A
— at 440 V rated value	0.42 A
— at 600 V rated value	0.42 A
• with 2 current paths in series at DC-1	
— at 24 V rated value	15 A
— at 60 V rated value	15 A
— at 110 V rated value	8.4 A
— at 220 V rated value	1.2 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.5 A

with 3 current paths in series at DC-1	45.4
— at 24 V rated value	15 A
— at 60 V rated value	15 A
— at 110 V rated value	15 A
— at 220 V rated value	15 A
— at 440 V rated value	0.9 A
— at 600 V rated value	0.7 A
at 1 current path at DC-3 at DC-5	
— at 24 V rated value	15 A
— at 60 V rated value	0.35 A
with 2 current paths in series at DC-3 at DC-5	
— at 24 V rated value	15 A
— at 60 V rated value	3.5 A
— at 110 V rated value	0.25 A
with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value	15 A
— at 60 V rated value	15 A
— at 110 V rated value	15 A
— at 220 V rated value	1.2 A
— at 440 V rated value	0.14 A
— at 600 V rated value	0.14 A
operating power	
• at AC-2 at 400 V rated value	3 kW
• at AC-3	
— at 230 V rated value	1.5 kW
— at 400 V rated value	3 kW
— at 500 V rated value	3 kW
— at 690 V rated value	4 kW
• at AC-3e	
— at 230 V rated value	1.5 kW
— at 400 V rated value	3 kW
— at 500 V rated value	3 kW
— at 690 V rated value	4 kW
operating power for approx. 200000 operating cycles at AC-	
4 a at 400 V rated value	1 15 MM
at 400 V rated value at 690 V rated value	1.15 kW
	1.15 kW
operating apparent power at AC-6a	4 E IA/A
up to 230 V for current peak value n=20 rated value	1.5 kVA
• up to 400 V for current peak value n=20 rated value	2.7 kVA
• up to 500 V for current peak value n=20 rated value	3.3 kVA
• up to 690 V for current peak value n=20 rated value	4.3 kVA
operating apparent power at AC-6a	
= up to vsu v tor current peak value n=30 rated value	4 14/4
• up to 230 V for current peak value n=30 rated value	1 kVA
• up to 400 V for current peak value n=30 rated value	1.8 kVA
 up to 400 V for current peak value n=30 rated value up to 500 V for current peak value n=30 rated value 	1.8 kVA 2.2 kVA
 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 	1.8 kVA
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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	1.8 kVA 2.2 kVA
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	1.8 kVA 2.2 kVA 2.9 kVA
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	1.8 kVA 2.2 kVA 2.9 kVA 120 A; Use minimum cross-section acc. to AC-1 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	1.8 kVA 2.2 kVA 2.9 kVA 120 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 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	1.8 kVA 2.2 kVA 2.9 kVA 120 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value 67 A; Use minimum cross-section acc. to AC-1 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	1.8 kVA 2.2 kVA 2.9 kVA 120 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value 67 A; Use minimum cross-section acc. to AC-1 rated value 52 A; Use minimum cross-section acc. to AC-1 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	1.8 kVA 2.2 kVA 2.9 kVA 120 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value 67 A; Use minimum cross-section acc. to AC-1 rated value 52 A; Use minimum cross-section acc. to AC-1 rated value
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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 ro-load switching frequency at DC	1.8 kVA 2.2 kVA 2.9 kVA 120 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value 67 A; Use minimum cross-section acc. to AC-1 rated value 52 A; Use minimum cross-section acc. to AC-1 rated value 43 A; Use minimum cross-section acc. to AC-1 rated value
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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 no-load switching frequency at DC operating frequency at AC-1 maximum	1.8 kVA 2.2 kVA 2.9 kVA 120 A; Use minimum cross-section acc. to AC-1 rated value 86 A; Use minimum cross-section acc. to AC-1 rated value 67 A; Use minimum cross-section acc. to AC-1 rated value 52 A; Use minimum cross-section acc. to AC-1 rated value 43 A; Use minimum cross-section acc. to AC-1 rated value 10 000 1/h 1 000 1/h

Control carcell Control Type of voltage of the control supply voltage Cortrol supply voltage at DC rated value 250 V Operating range factor control supply voltage rated value of enginet cell at 0. • Inflicated value • Inflicated value • Inflicated value • at DC Somming factor • at Somm	• at AC-4 maximum	250 1/h
type of voltage of the control supply voltage control supply voltage at DC rated value spenaring range factor control supply voltage rated value of superating range factor control supply voltage rated value of efficiency value closing power of magnot coil at DC 4 W notified value closing power of magnot coil at DC 4 W notified power of magnot coil at DC 4 W at DC 30100 ms poperating delay • at DC 713 ms arcing time control variation of the switch operating mechanism Sandard A1 _ A2 **Auxillary creat number of NO contracts for auxiliary contacts instantaneous contact contact 10 _ 15 ms control variation of the switch operating mechanism Auxillary creat number of NO contracts for auxiliary contacts instantaneous contact - 220 V rated value • 10 A • 11 0 A • 12 20 V rated value • 10 A •		
Control supply voltage at LDC rated value		DC:
operating range factor control supply voltage rated value of magnet coil at BC initial volue closing power of magnet coil at DC AW holding power of magnet coil at DC Losing delay at DC operating delay at DC control version of the switch operating mechanism Awattlary critical runubse of NO contacts for auxiliary contacts instantaneous control version of the switch operating mechanism Awattlary critical runubse of NO contacts for auxiliary contacts instantaneous control version of the switch operating mechanism Awattlary critical runubse of NO contacts for auxiliary contacts instantaneous control version of version of the switch operating mechanism Awattlary critical runubse of NO contacts for auxiliary contacts instantaneous control operational current at AC-12 maximum operational current at DC-12 at 20 V rated value at 80 OV rated value at 80 OV rated value at 80 V rated value at 10 V rated value at 10 V rated value at 20 V rated value at 80 V ra		
Initial value 0.8		250 V
• full scale value		
Closing power of magnet coil at DC	• initial value	0.8
closing power of magnet coil at DC	full-scale value	1.1
holding power of magnet coil at DC closing delay		4 W
at IDC		
• at DC opening delay • at DC arcing time control version of the switch operating mechanism Standard A1 - A2 Auxillary circuit number of NO contacts for auxiliary contacts instartaneous contact operational current at AC-12 maximum operational current at AC-12 maximum operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 500 V rated value • at 500 V rated value • at 600 V rated value • at 600 V rated value • at 60 V rated value • at 60 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 60 V		
opening delay		30 100 ms
acring time		
arcing time		7 13 ms
Control version of the switch operating mechanism Standard A1 - A2		
Auxiliary circuit number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value • at 690 V rated value • at 84 V rated value • at 84 V rated value • at 87 V rated value • at 88 V rated value • at 89 V rated value • at 80 V rated value • at 110 V rated value • at 220 V rated value • at 220 V rated value • at 80 V rated value • at 110 V rated value • at 80 V rated		
Dumber of NO contacts for auxiliary contacts instantaneous		Oldinatio / II / E
Donate		1
at 230 V rated value		
a t 230 V rated value		10 A
• at 230 V rated value • at 400 V rated value • at 400 V rated value • at 690 V rated value • at 48 V rated value • at 48 V rated value • at 60 V rated value • at 60 V rated value • at 125 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 60 V rated value • at 100 V rated value • at 60 V rated valu		
* at 500 V rated value	•	10 A
* at 500 V rated value	• at 400 V rated value	3 A
• at 690 V rated value		
Operational current at DC-12		
	•	10 A
	• at 48 V rated value	6 A
		6 A
• at 220 V rated value • at 600 V rated value 0 operational current at DC-13 • at 24 V rated value 10 A • at 48 V rated value 2 A • at 80 V rated value 2 A • at 110 V rated value 9 at 125 V rated value 0 .3 A • at 220 V rated value 0 .3 A • at 220 V rated value 0 .3 A • at 800 V rated value 1 I 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 4 .8 A • at 600 V rated value 6 .1 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 0 .25 hp — at 230 V rated value 0 .75 hp • for 3-phase AC motor — at 200/208 V rated value 1 .5 hp — at 220/230 V rated value 2 hp — at 250/230 V rated value 2 hp — at 460/480 V rated value 3 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the fruse link	at 110 V rated value	3 A
at 220 V rated value 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 110 V rated value 2 A at 110 V rated value 3 1 H at 125 V rated value 3 A at 220 V rated value 3 A at 280 V rated value 4 A 5 A 5 A contact reliability of auxiliary contacts ULCSA ratings full-load current (FLA) for 3-phase AC motor 4 A 8 A 4 A 4 A 5 A 5 A 5 A 5 A 5 A 5 A 5 A 6 B 6 B 6 B 6 B 6 B 6 B 7 B 7 B 7 B 7 B 7 B 7 B 7 B 7 B 7 B 7	at 125 V rated value	2 A
■ at 600 V rated value Operational current at DC-13 ■ at 24 V rated value ■ at 48 V rated value ■ at 48 V rated value ■ at 60 V rated value ■ at 110 V rated value ■ at 125 V rated value ■ at 125 V rated value ■ at 220 V rated value ■ at 220 V rated value ■ at 220 V rated value ■ at 200 V rated value ■ at 200 V rated value ■ at 600 V rated value ■ at 480 V rated value ■ at 100 V rated value ■ at 110/120 V rated value ■ at 110/120 V rated value ■ at 230 V rated value ■ at 230 V rated value ■ at 200/208 V rated value ■ at 200/208 V rated value ■ at 480/480 V rated value ■ at 575/600 V rated value ■ at 800 / Q600 Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V		1 A
operational current at DC-13 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 1110 V rated value • at 1110 V rated value • at 1110 V rated value • at 22 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value contact reliability of auxiliary contacts ULICSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • at 110/120 V rated value • at 320 V rated value • at 230 V rated value • for 3-phase AC motor - at 200/208 V rated value • for 3-phase AC motor - at 200/208 V rated value • for 3-phase AC motor - at 480/480 V rated value • for 3-phase AC motor - at 275/600 V rated value - at 575/600 V rated value - at 575/600 V rated value - at 575/600 V rated value - 5 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link		0.15 A
at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 220 V rated value at 200 V rated value at 600 V rated value at 48 V rated value at 600 V rated value at 600 V rated value at 600 V rated value 4.8 A at 600 V rated value 4.8 A at 600 V rated value before single-phase AC motor at 110/120 V rated value at 10/120 V rated value at 220/230 V rated value befor 3-phase AC motor at 200/208 V rated value at 200/208 V rated value at 600 V rated value befor 3-phase AC motor at 200/208 V rated value at 200/208 V rated value befor 3-phase AC motor at 200/208 V rated value at 600 V rated value befor 3-phase AC motor at 200/208 V rated value befor 3-phase AC motor at 200/208 V rated value befor 3-phase AC motor at 200/208 V rated value befor 3-phase AC motor at 200/208 V rated value befor 3-phase AC motor at 200/208 V rated value befor 3-phase AC motor at 200/208 V rated value befor 3-phase AC motor at 200/208 V rated value contact rating of auxiliary cortacts according to UL Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link	operational current at DC-13	
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at 10 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 220 V rated value at 600 V rated value at 600 V rated value at 600 V rated value at 600 V rated value tontact reliability of auxiliary contacts I faulty switching per 100 million (17 V, 1 mA) IU/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value for single-phase AC motor at 110/120 V rated value for 3-phase AC motor at 230 V rated value for 3-phase AC motor at 200/208 V rated value for 3-phase AC motor at 200/208 V rated value for 3-phase AC motor at 200/208 V rated value for 3-phase AC motor at 200/208 V rated value for 3-phase AC motor at 200/208 V rated value for 3-phase AC motor at 200/208 V rated value for 3-phase AC motor at 200/208 V rated value for 3-phase AC motor at 200/208 V rated value for 3-phase AC motor at 200/208 V rated value for 3-phase AC motor at 200/208 V rated value for 3-phase AC motor at 600/480 V rated value for 600 V rated value for 600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link	at 48 V rated value	2 A
 at 110 V rated value 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 at 600 V rated value for single-phase AC motor at 110/120 V rated value for single-phase AC motor at 230 V rated value of 3-phase AC motor at 200/208 V rated value for 3-phase AC motor at 200/208 V rated value 1.5 hp at 200/208 V rated value 2 hp at 460/480 V rated value 3 hp at 575/600 V rated value 5 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link C characteristic: 10 A; 0.4 kA	at 60 V rated value	
at 125 V rated value at 220 V rated value 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 4.8 A at 600 V rated value 5.1 A yielded mechanical performance [hp] of or single-phase AC motor - at 110/120 V rated value 0.25 hp - at 230 V rated value 0.75 hp of or 3-phase AC motor - at 200/208 V rated value 1.5 hp - at 220/230 V rated value 2 hp - at 460/480 V rated value 3 hp - at 575/600 V rated value 2 hp - at 575/600 V rated value 5 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link		
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full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • for single-phase AC motor — at 110/120 V rated value • for 3-phase AC motor — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value • for 3-phase AC motor — at 220/230 V rated value — at 220/230 V rated value — at 575/600 V rated value 5 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link		
 at 480 V rated value at 600 V rated value for single-phase AC motor at 110/120 V rated value -at 230 V rated value for 3-phase AC motor at 200/208 V rated value -at 220/230 V rated value 2 hp at 220/230 V rated value 2 hp at 460/480 V rated value 3 hp at 575/600 V rated value 5 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link 		
at 600 V rated value yielded mechanical performance [hp] of or single-phase AC motor — at 110/120 V rated value — at 230 V rated value of or 3-phase AC motor — at 200/208 V rated value 1.5 hp — at 220/230 V rated value at 460/480 V rated value — at 460/480 V rated value at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link 6.1 A 6.1 A 6.1 A 6.1 A 6.1 A 6.2 hp 6.2 hp 6.2 hp 6.3 hp 6.4 A 6.5 hp 6.6 A 6.6 A 6.7 hp 6.7 hp 6.7 hp 6.8 hp 6.9 hp	• •	4.8 A
yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value — o.75 hp • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link		
for single-phase AC motor — at 110/120 V rated value — at 230 V rated value — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value — A600 / Q600 Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link		
- at 110/120 V rated value 0.25 hp - at 230 V rated value 0.75 hp • for 3-phase AC motor - at 200/208 V rated value 1.5 hp - at 220/230 V rated value 2 hp - at 460/480 V rated value 3 hp - at 575/600 V rated value 5 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link 0.25 hp 0.75 hp 0.75 hp 1.5 hp 2 hp 3 hp 4600 / Q600 C characteristic: 10 A; 0.4 kA		
- at 230 V rated value • for 3-phase AC motor - at 200/208 V rated value - at 220/230 V rated value - at 460/480 V rated value - at 575/600 V rated value 5 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link 0.75 hp 1.5 hp 2 hp 3 hp 5 hp Contact rating of auxiliary contacts according to UL A600 / Q600 C characteristic: 10 A; 0.4 kA		0.25 hp
● for 3-phase AC motor — at 200/208 V rated value 1.5 hp — at 220/230 V rated value 2 hp — at 460/480 V rated value 3 hp — at 575/600 V rated value 5 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link		
- at 200/208 V rated value - at 220/230 V rated value 2 hp - at 460/480 V rated value 3 hp - at 575/600 V rated value 5 hp contact rating of auxiliary contacts according to UL Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link		op
- at 220/230 V rated value 2 hp - at 460/480 V rated value 3 hp - at 575/600 V rated value 5 hp contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link	•	1.5 hp
— at 460/480 V rated value 3 hp — at 575/600 V rated value 5 hp contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link		
— at 575/600 V rated value 5 hp contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link		
contact rating of auxiliary contacts according to UL Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link A600 / Q600 C characteristic: 10 A; 0.4 kA		
Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link C characteristic: 10 A; 0.4 kA		
design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link C characteristic: 10 A; 0.4 kA		
design of the fuse link	design of the miniature circuit breaker for short-circuit protection	C characteristic: 10 A; 0.4 kA
	<u> </u>	
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 — with type of coordination 1 required 	gG: 35A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)
with type of assignment 2 required	gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)
for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)
Installation/ mounting/ dimensions	
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
fastening method side-by-side mounting	Yes
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
height	58 mm
width	45 mm
depth	73 mm
required spacing	
with side-by-side mounting	40
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
for grounded parts forwards	10 mm
— forwards	10 mm
— upwards — at the side	6 mm
— at the side — downwards	10 mm
for live parts	1V 11111
— 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 (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
— solid or stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x 4 mm²
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
for AWG cables for main contacts	2x (20 16), 2x (18 14), 2x 12
connectable conductor cross-section for main contacts	
• solid	0.5 4 mm²
• stranded	0.5 4 mm²
finely stranded with core end processing	0.5 2.5 mm²
connectable conductor cross-section for auxiliary contacts	
solid or stranded	0.5 4 mm ²
finely stranded with core end processing	0.5 2.5 mm²
type of connectable conductor cross-sections	
for auxiliary contacts	0 (05, 45, 3) 0 (075, 05, 3)
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
— finely stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
for AWG cables for auxiliary contacts AWG number on good compostable conductor areas.	2x (20 16), 2x (18 14), 2x 12
AWG number as coded connectable conductor cross section	20 12
• for main contacts	20 12
for auxiliary contacts Sofety related data	20 12
Safety related data	
product function	Voc. with 2PH20
mirror contact according to IEC 60947-4-1 positively driven energtion according to IEC 60947-5-1	Yes; with 3RH29
positively driven operation according to IEC 60947-5-1 suitable for safety function	No Vec
suitable for safety function suitability for use safety related switching OFF	Yes
suitability for use safety-related switching OFF	Yes

20 a
Yes
40 %
73 %
1 000 000
100 FIT
3
Yes
Type A
IP20
finger-safe, for vertical contact from the front

General Product Approval







Confirmation



<u>KC</u>

General Product Approval

EMV

Test Certificates

Marine / Shipping





Special Test Certificate

Type Test Certificates/Test Report





Marine / Shipping other











Miscellaneous

other

Railway

Dangerous goods

Environment

Confirmation

Special Test Certificate

Transport Information



Environmental Confirmations

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=3RT2015-1BN41

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2015-1BN41

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT2015-1BN41

https://support.industry.siemens.com/cs/ww/en/ps/3R12013-16N41

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

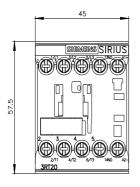
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2015-1BN41&lang=en

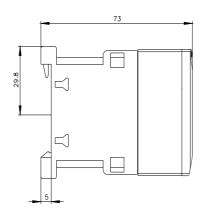
Characteristic: Tripping characteristics, I^2t , Let-through current

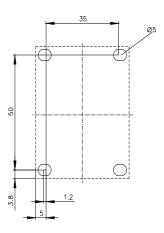
https://support.industry.siemens.com/cs/ww/en/ps/3RT2015-1BN41/char

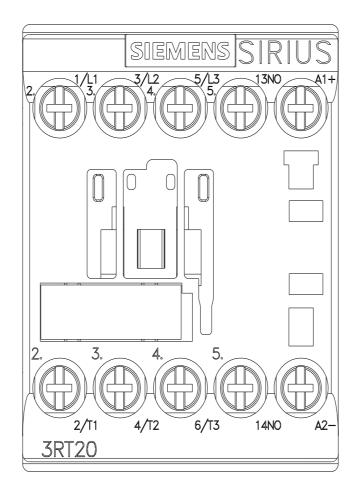
Further characteristics (e.g. electrical endurance, switching frequency)

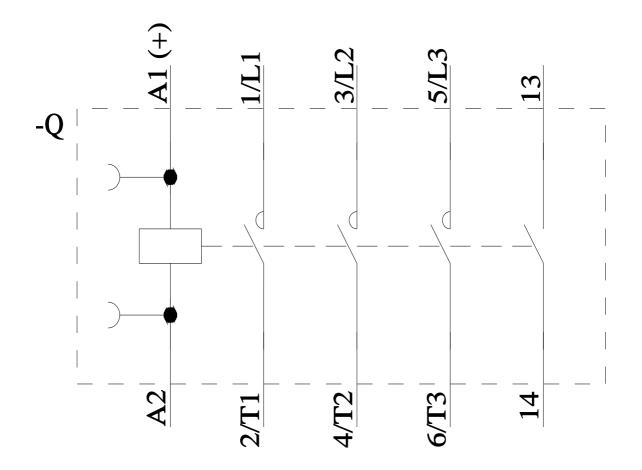
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2015-1BN41&objecttype=14&gridview=view1











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