SIEMENS

Data sheet 3RT2028-1AG24



Contactor, AC-3, 18.5 kW / 400 V, 2 NO + 2 NC, 110 V AC, 3-pole, Size S0 screw terminal Removable auxiliary switch

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S0
product extension	
 function module for communication 	No
auxiliary switch	No
power loss [W] for rated value of the current	
 at AC in hot operating state 	9.6 W
 at AC in hot operating state per pole 	3.2 W
 without load current share typical 	10.5 W
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 safe isolation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at AC	8,3g / 5 ms, 5,3g / 10 ms
shock resistance with sine pulse	
• at AC	13,5g / 5 ms, 8,3g / 10 ms
mechanical service life (switching cycles)	
 of contactor typical 	10 000 000
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000
 of the contactor with added auxiliary switch block typical 	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
during operation	-25 +60 °C
during storage	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
Main circuit	

number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	ŭ
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	50 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	50 A
 — up to 690 V at ambient temperature 60 °C rated value at AC-3 	42 A
— at 400 V rated value	38 A
— at 500 V rated value	32 A
— at 690 V rated value	21 A
• at AC-3e	
— at 400 V rated value	38 A
— at 500 V rated value	32 A
— at 690 V rated value	21 A
• at AC-4 at 400 V rated value	22 A
• at AC-5a up to 690 V rated value	44 A
• at AC-5b up to 400 V rated value	31.5 A
• at AC-6a	
 up to 230 V for current peak value n=20 rated value 	30.8 A
 up to 400 V for current peak value n=20 rated value 	30.8 A
— up to 500 V for current peak value n=20 rated value	30.8 A
 up to 690 V for current peak value n=20 rated value at AC-6a 	21 A
up to 230 V for current peak value n=30 rated value	20.5 A
 up to 400 V for current peak value n=30 rated value 	20.5 A
— up to 500 V for current peak value n=30 rated value	21.4 A
— up to 690 V for current peak value n=30 rated value minimum cross-section in main circuit at maximum AC-1	21 A 10 mm ²
rated value operational current for approx. 200000 operating	
cycles at AC-4	
 at 400 V rated value 	12 A
• at 690 V rated value	12 A
operational current	
at 1 current path at DC-1	
— at 24 V rated value	35 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 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	05.4
— at 24 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

-t COO \ /tdl	4.4.4
— at 600 V rated value	1.4 A
• at 1 current path at DC-3 at DC-5	00.4
— at 24 V rated value	20 A
— at 220 V rated value	1 A
— at 440 V rated value	0.09 A
— at 600 V rated value	0.06 A
with 2 current paths in series at DC-3 at DC-5 ct 24 V rated value.	35 A
— at 24 V rated value	15 A
— at 110 V rated value— 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	0:10 A
— at 24 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-3	
— at 230 V rated value	11 kW
— at 400 V rated value	18.5 kW
— at 500 V rated value	18.5 kW
— at 690 V rated value	18.5 kW
• at AC-3e	
— at 230 V rated value	11 kW
— at 400 V rated value	18.5 kW
— at 500 V rated value	18.5 kW
— at 690 V rated value	18.5 kW
operating power for approx. 200000 operating cycles at AC-4	
 at 400 V rated value 	6 kW
 at 690 V rated value 	10.3 kW
operating apparent power at AC-6a	
 up to 230 V for current peak value n=20 rated value 	12.2 kVA
 up to 400 V for current peak value n=20 rated value 	21.3 kVA
 up to 500 V for current peak value n=20 rated value 	26.6 kVA
 up to 690 V for current peak value n=20 rated value 	25 kVA
operating apparent power at AC-6a	
• up to 230 V for current peak value n=30 rated value	8.1 kVA
• up to 400 V for current peak value n=30 rated value	14.2 kVA
• up to 500 V for current peak value n=30 rated value	18.5 kVA
• up to 690 V for current peak value n=30 rated value	25 kVA
short-time withstand current in cold operating state up to 40 °C	
Iimited to 1 s switching at zero current maximum	593 A; Use minimum cross-section acc. to AC-1 rated value
Iimited to 5 s switching at zero current maximum	341 A; Use minimum cross-section acc. to AC-1 rated value
Iimited to 10 s switching at zero current maximum	260 A; Use minimum cross-section acc. to AC-1 rated value
Ilimited to 30 s switching at zero current maximum	199 A; Use minimum cross-section acc. to AC-1 rated value
Iimited to 60 s switching at zero current maximum no load switching frequency.	162 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency • at AC	5 000 1/h
operating frequency	0 000 1/11
• at AC-1 maximum	1 000 1/h
• at AC-2 maximum	750 1/h
• at AC-3 maximum	750 1/h
at AC-3 maximum at AC-3e maximum	750 1/h
• at AC-4 maximum	250 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	AO .
at 50 Hz rated value	110 V
at 50 Hz rated value at 60 Hz rated value	110 V
operating range factor control supply voltage rated	
The same of the sa	

Value of magnet coil at AC		
a ris 0-172	value of magnet coil at AC	
apparent plck-up power of magnet coll at AC a cf 50 Hz cf 60 Hz cf 60 Hz cf 60 Hz cf 60 Hz cf 79 WA cf 79		
* at 50 Hz	● at 60 Hz	0.85 1.1
a #160 1+2	apparent pick-up power of magnet coil at AC	
inductive power factor with closing power of the coil	● at 50 Hz	81 VA
	● at 60 Hz	79 VA
■ al 60 Hz	inductive power factor with closing power of the coil	
apparent holding power of magnet coil at AC	● at 50 Hz	0.72
	● at 60 Hz	0.74
	apparent holding power of magnet coil at AC	
at 80 Hz		10.5 VA
inductive power factor with the holding power of the coll		
oal 150 Hz ■ at 50 Hz ■ at 60 Hz ■ at 60 Hz ■ at AC opening delay ■ at AC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-14 maximum operational current at AC-15 ■ at 230 V rated value ■ at 460 V rated value ■ at 48 V rated value ■ at 48 V rated value ■ at 48 V rated value ■ at 125 V		0.0 1/1
• at 80 Hz closing delay • at AC opening delay • at AC arcing time control version of the switch operating mechanism Auxiliary circuit 10 A 4		
• at 80 Hz closing delay • at AC opening delay • at AC arcing time control version of the switch operating mechanism Auxiliary circuit 10 A 4	● at 50 Hz	0.25
Closing delay		
e at AC opening delay e at AC arcing time control version of the switch operating mechanism Auxiliary circuit rumber of NC contacts for auxiliary contacts instantaneous contact rumber of NC contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 e at 230 V rated value e at 430 V rated value e at 500 V rated value e at 600 V rated value e at 100 V rated value e at 220 V rated value e at 220 V rated value e at 220 V rated value e at 48 V rated value e at 60 V rated value e at 125 V rated value e at 200 V rated value e at 600 V rated		
e at AC arcing time control version of the switch operating mechanism Auxillary circuit		8 40 ms
* at AC		5 40 III0
arcing time	. •	4 16 ms
Control version of the switch operating mechanism Standard A1 - A2		
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts contact number of NO contacts for auxiliary contacts operational current at AC-15 operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 500 V rated value • at 64 V rated value • at 48 V rated value • at 48 V rated value • at 125 V rated value • at 126 V rated value • at 127 V rated value • at 128 V rated value • at 129 V rated value • at 120 V rated value • at 125 V rated value • at 126 V rated value • at 220 V rated value • at 24 V rated value • at 60 V rated value • at 100 V rated value • at 100 V rated value • at 125 V rated value • at 125 V rated value • at 127 V rated value • at 128 V rated value • at 117 V rated value • at 117 V rated value • at 117 V rated value • at 118 V rated value • at 118 V rated value • at 119 V rated value • at 110 V rated value • at 120 V rated value • at 20 V rated value • at 20 V rated value • at 20 V rated value • at 30 V rated value • at 480 V rated value • at 480 V rated value • at 20 V rated		
number of NC contacts for auxiliary contacts 2	<u> </u>	Standard AT - AZ
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum	· · · · · · · · · · · · · · · · · · ·	
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	· · · · · · · · · · · · · · · · · · ·	2
instantaneous contact operational current at AC-12 maximum 10 A operational current at AC-15 • at 230 V rated value 6 A		
operational current at AC-12 maximum operational current at AC-15 at 230 V rated value 6 A at 400 V rated value 2 A at 690 V rated value 1 A operational current at DC-12 at 24 V rated value 1 A operational current at DC-12 at 48 V rated value 1 A at 48 V rated value 3 A at 150 V rated value 6 A at 110 V rated value 6 A at 110 V rated value 1 A at 125 V rated value 1 A at 220 V rated value 1 A at 600 V rated value 2 A at 24 V rated value 2 A at 25 V rated value 4 A at 600 V rated value 5 A at 24 V rated value 2 A at 600 V rated value 2 A at 600 V rated value 2 A at 600 V rated value 3 A at 24 V rated value 5 A at 24 V rated value 6 A at 220 V rated value 9 A at 600 V rated value 9 A at 600 V rated value 1 A at 125 V rated value 9 A at 120 V rated value 9 A at 220 V rated value 9 A 4 A 4 A 4 A 4 A 4 A 4 A 4 A 4 A 4 A 4		2
operational current at AC-15		40.4
	•	10 A
	•	
• at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 110 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 360 V rated value • at 360 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 48 V rated value • at 48 V rated value • at 600 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 250 V rated value • at 270 V rated value • at 280 V rated value • at 340 V rated value • at 480 V rated value • at 480 V rated value • at 600 V rated value • at 600 V rated value • at 480 V rated value • at 600 V rated value • at 27 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value • for 3-phase AC motor — at 200/208 V rated value • for 3-phase AC motor — at 480 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 460/480 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 556/600 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 556/600 V rated value • for 3-ph		
Operational current at DC-12		
		1 A
 at 48 V rated value at 60 V rated value at 110 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 0.15 A operational current at DC-13 at 24 V rated value at 34 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 110 V rated value at 125 V rated value at 125 V rated value at 120 V rated value at 220 V rated value at 200 V rated value at 48 W rated value at 27 A yielded mechanical performance [hp] for single-phase AC motor at 110 W rated value at 230 V rated value bhp for 3-phase AC motor at 200/208 V rated value for 3-phase AC motor at 200/208 V rated value for hp at 220/230 V rated value bhp at 460/480 V rated value 25 hp at 575/600 V rated value 25 hp at 575/600 V rated value 25 hp 	operational current at DC-12	
 at 60 V rated value at 110 V rated value at 125 V rated value 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 at 48 V rated value at 60 V rated value at 10 V rated value at 10 V rated value at 25 V rated value at 25 V rated value at 260 V rated value at 600 V rated value at 480 V rated value at 600 V rated value at 600 V rated value at 7 A ILI/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value at 7 A if or single-phase AC motor at 230 V rated value 5 hp for 3-phase AC motor at 200/208 V rated value 5 hp for 3-phase AC motor at 200/208 V rated value by 7 A for 3-phase AC motor at 200/208 V rated value by 7 A for 3-phase AC motor at 200/208 V rated value by 7 A for 3-phase AC motor at 480/480 V rated value by 7 A for 3-phase AC motor at 460/480 V rated value by 7 A for 3-phase AC motor at 200/208 V rated value by 7 A for 3-phase AC motor at 460/480 V rated value 25 hp at 575/600 V rated value 25 hp 	 at 24 V rated value 	10 A
 at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value ontroperational current at DC-13 at 24 V rated value at 48 V rated value at 48 V rated value at 600 V rated value at 110 V rated value at 110 V rated value at 110 V rated value at 125 V rated value at 125 V rated value at 125 V rated value at 600 V rated value at 7 A at 480 V rated value at 600 V rated value at 7 A at 200 V rated value at 27 A yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value at 230 V rated value for 3-phase AC motor at 230 V rated value for 3-phase AC motor at 200/228 V rated value for 3-phase AC motor at 200/230 V rated value for 3-phase AC motor at 200/230 V rated value for phase AC motor at 200/230 V rated value for phase AC motor at 200/230 V rated value for phase AC motor at 200/230 V rated value for phase AC motor at 460/480 V rated value for phase AC motor at 460/480 V rated value for phase AC motor at 575/600 V rated value for phase AC motor for phase AC motor	 at 48 V rated value 	6 A
 at 125 V rated value at 220 V rated value at 600 V rated value operational current at DC-13 at 24 V rated value at 24 V rated value at 60 V rated value at 10 V rated value at 110 V rated value at 125 V rated value at 125 V rated value at 125 V rated value at 220 V rated value at 220 V rated value at 600 V rated value at 480 V rated value at 600 V rated value at 600 V rated value at 7 A yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value at 230 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 460/480 V rated value 25 hp 	 at 60 V rated value 	6 A
 at 220 V rated value at 600 V rated value 0.15 A operational current at DC-13 at 24 V rated value at 48 V rated value at 60 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 125 V rated value at 220 V rated value at 200 V rated value at 600 V rated value at 7 A at 100 V rated value at 27 A yielded mechanical performance [hp] for single-phase AC motor at 101/120 V rated value at 230 V rated value bhp at 200/208 V rated value at 460/480 V rated value at 575/600 V rated value 25 hp 	 at 110 V rated value 	3 A
• at 600 V rated value 0.15 A operational current at DC-13 • at 24 V rated value 6 A • at 48 V rated value 2 A • at 60 V rated value 1 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 260 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 27 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 3 hp — at 230 V rated value 5 hp • for 3-phase AC motor — at 200/208 V rated value 5 hp • for 3-phase AC motor — at 200/208 V rated value 10 hp — at 200/208 V rated value 25 hp — at 575/600 V rated value 25 hp — at 575/600 V rated value 25 hp — at 575/600 V rated value 25 hp	 at 125 V rated value 	2 A
operational current at DC-13	 at 220 V rated value 	1 A
• at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 110 V rated value • at 125 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 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 • at 600 V rated value i 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 — at 220/230 V rated value — at 460/480 V rated value — at 4575/600 V rated value — 25 hp — at 575/600 V rated value — 25 hp	at 600 V rated value	0.15 A
 at 48 V rated value at 60 V rated value at 110 V rated value at 112 V rated value at 125 V rated value at 220 V rated value at 220 V rated value at 600 V rated value at 480 V rated value at 480 V rated value at 600 V rated value at 600 V rated value at 7 A yielded mechanical performance [hp] for single-phase AC motor at 230 V rated value for 3-phase AC motor at 200/208 V rated value at 200/208 V rated value at 480/480 V rated value at 460/480 V rated value at 575/600 V rated value at 57b/600 V rated value 	operational current at DC-13	
 at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 480 V rated value at 600 V rated value at 10/120 V rated value at 10/120 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 460/480 V rated value at 460/480 V rated value at 575/600 V rated value bp 	at 24 V rated value	6 A
 at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 480 V rated value at 600 V rated value at 10/120 V rated value at 10/120 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 460/480 V rated value at 460/480 V rated value at 575/600 V rated value bp 	at 48 V rated value	2 A
 at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 480 V rated value at 600 V rated value at 10/120 V rated value at 230 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 220/230 V rated value at 460/480 V rated value at 460/480 V rated value at 575/600 V rated value bp 		
 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 at 600 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 at 220/230 V rated value at 460/480 V rated value at 460/480 V rated value at 5 hp at 460/480 V rated value 25 hp at 575/600 V rated value 25 hp 		
 at 220 V rated value at 600 V rated value 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 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 at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value 25 hp 		
 at 600 V rated value 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 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 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 25 hp 		
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 9 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 200/208 V rated value - at 220/230 V rated value - at 460/480 V rated value - at 575/600 V rated value 25 hp - at 575/600 V rated value 25 hp		
## Comparison of Comparison o		
full-load current (FLA) for 3-phase AC motor • at 480 V rated value 34 A • at 600 V rated value 27 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 3 hp — at 230 V rated value 5 hp • for 3-phase AC motor — at 200/208 V rated value 10 hp — at 220/230 V rated value 10 hp — at 460/480 V rated value 25 hp — at 575/600 V rated value 25 hp		Tradity Switching per 100 Hillion (17 V, 1 Hiz)
 at 480 V rated value at 600 V rated value yielded mechanical performance [hp] 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 at 460/480 V rated value at 575/600 V rated value 		
 at 600 V rated value yielded mechanical performance [hp] 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 — at 460/480 V rated value — at 575/600 V rated value 25 hp 		
yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 3 hp — at 230 V rated value 5 hp • for 3-phase AC motor — at 200/208 V rated value 10 hp — at 220/230 V rated value 10 hp — at 460/480 V rated value 25 hp — at 575/600 V rated value 25 hp		
 for single-phase AC motor — at 110/120 V rated value 3 hp — at 230 V rated value 5 hp for 3-phase AC motor — at 200/208 V rated value 10 hp — at 220/230 V rated value 10 hp — at 460/480 V rated value 25 hp — at 575/600 V rated value 25 hp 		27 A
 — at 110/120 V rated value — at 230 V rated value 5 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 575/600 V rated value 25 hp 		
 — 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 25 hp 		
● for 3-phase AC motor — at 200/208 V rated value 10 hp — at 220/230 V rated value 10 hp — at 460/480 V rated value 25 hp — at 575/600 V rated value 25 hp	 — at 110/120 V rated value 	3 hp
- at 200/208 V rated value 10 hp - at 220/230 V rated value 10 hp - at 460/480 V rated value 25 hp - at 575/600 V rated value 25 hp	— at 230 V rated value	5 hp
— at 220/230 V rated value 10 hp — at 460/480 V rated value 25 hp — at 575/600 V rated value 25 hp	 for 3-phase AC motor 	
— at 220/230 V rated value 10 hp — at 460/480 V rated value 25 hp — at 575/600 V rated value 25 hp	 at 200/208 V rated value 	10 hp
— at 460/480 V rated value 25 hp — at 575/600 V rated value 25 hp	 at 220/230 V rated value 	
— at 575/600 V rated value 25 hp	— at 460/480 V rated value	
\cdot	— at 575/600 V rated value	
	contact rating of auxiliary contacts according to UL	A600 / Q600

Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit with type of coordination 1 required gG: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A (415V,80kA) - with type of assignment 2 required gG: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA) • for short-circuit protection of the auxiliary switch gG: 10 A (500 V, 1 kA) required Installation/ mounting/ dimensions mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes • side-by-side mounting 85 mm height width 45 mm depth 141 mm required spacing • with side-by-side mounting 10 mm forwards 10 mm - upwards downwards 10 mm - at the side 0 mm • for grounded parts 10 mm — forwards 10 mm - upwards - at the side 6 mm - downwards 10 mm · for live parts 10 mm - forwards - 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 2x (1 ... 2.5 mm²), 2x (2.5 ... 10 mm²) - solid - 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 · at AWG cables for main contacts 2x (16 ... 12), 2x (14 ... 8) connectable conductor cross-section for main contacts solid 1 ... 10 mm² stranded 1 ... 10 mm² • finely stranded with core end processing 1 ... 10 mm² connectable conductor cross-section for auxiliary contacts 0.5 ... 2.5 mm² solid or stranded • finely stranded with core end processing 0.5 ... 2.5 mm² type of connectable conductor cross-sections · for auxiliary contacts 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) solid or stranded finely stranded with core end processing 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) · at AWG cables for auxiliary contacts 2x (20 ... 16), 2x (18 ... 14) AWG number as coded connectable conductor cross section · for main contacts 16 ... 8 • for auxiliary contacts 20 ... 14

Safety related data product function • mirror contact according to IEC 60947-4-1 Yes • positively driven operation according to IEC 60947-No 5-1 450 000 B10 value with high demand rate according to SN 31920 proportion of dangerous failures • 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 100 FIT 31920 T1 value for proof test interval or service life according to 20 y IEC 61508 protection class IP on the front according to IEC IP20 60529

Yes

safety-related switching OFF Certificates/ approvals

suitability for use

General Product Approval



Confirmation

touch protection on the front according to IEC 60529





finger-safe, for vertical contact from the front

<u>KC</u>



Functional
EMC Safety/Safety of Declaration of Conformity Test Certificates
Machinery



Type Examination Certificate





Type Test Certificates/Test Report

Special Test Certificate

Marine / Shipping













other Railway

Confirmation



Confirmation

Vibration and Shock

Further informatior

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=3RT2028-1AG24

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2028-1AG24

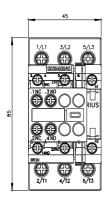
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

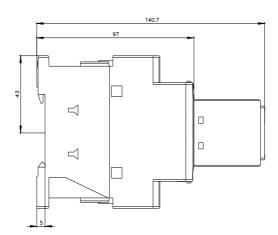
https://support.industry.siemens.com/cs/ww/en/ps/3RT2028-1AG24

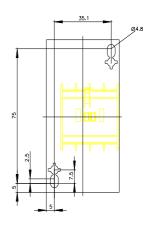
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

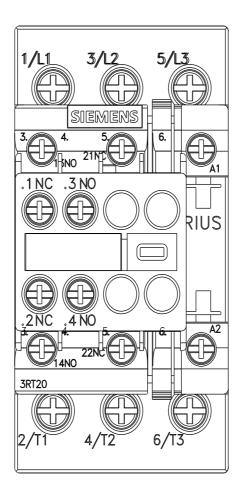
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2028-1AG24\&lang=en}}$

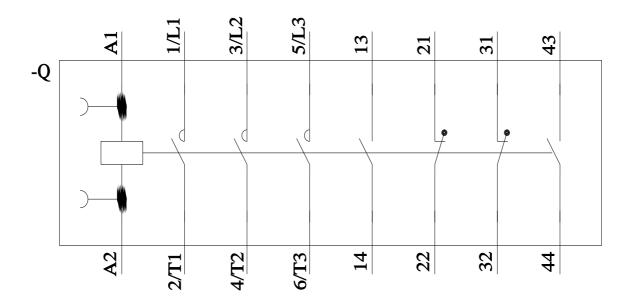
Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2028-1AG24&objecttype=14&gridview=view1











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