## **SIEMENS**

Data sheet 3RT2035-1AF00



power contactor, AC-3 40 A, 18.5 kW / 400 V 1 NO + 1 NC, 110 V AC 50 Hz, 3-pole, Size S2, screw terminal

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S2
product extension	
<ul> <li>function module for communication</li> </ul>	No
auxiliary switch	Yes
power loss [W] for rated value of the current at AC in hot operating state	6.6 W
• per pole	2.2 W
power loss [W] for rated value of the current without load current share typical	16 W
surge voltage resistance	
<ul> <li>of main circuit rated value</li> </ul>	6 kV
of auxiliary circuit rated value	6 kV
maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1	400 V
shock resistance at rectangular impulse	
at AC	11.8g / 5 ms, 7.4g / 10 ms
shock resistance with sine pulse	
• at AC	18.5g / 5 ms, 11.6g / 10 ms
mechanical service life (switching cycles)	
of contactor typical	10 000 000
<ul> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> </ul>	5 000 000
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000
reference code acc. to IEC 81346-2	Q
Substance Prohibitance (Date)	01.10.2014 00:00:00
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +60 °C
<ul> <li>during storage</li> </ul>	-55 +80 °C
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
operational current	

<ul> <li>at AC-1 at 400 V at ambient temperature 40 °C rated value</li> <li>at AC-1</li> </ul>	60 A
— up to 690 V at ambient temperature 40 $^{\circ}\text{C}$ rated value	60 A
<ul> <li>up to 690 V at ambient temperature 60 °C rated value</li> </ul>	55 A
• at AC-3	
— at 400 V rated value	41 A
— at 500 V rated value	41 A
— at 690 V rated value	24 A
<ul><li>at AC-4 at 400 V rated value</li></ul>	35 A
<ul> <li>at AC-5a up to 690 V rated value</li> </ul>	52.8 A
<ul> <li>at AC-5b up to 400 V rated value</li> </ul>	33.2 A
• at AC-6a	
<ul> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	36.5 A
— up to 400 V for current peak value n=20 rated value	36.5 A
— up to 500 V for current peak value n=20 rated value	36.5 A
<ul><li>— up to 690 V for current peak value n=20 rated value</li><li>at AC-6a</li></ul>	24 A
<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	24.2 A
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	24.2 A
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	24.2 A
— up to 690 V for current peak value n=30 rated value	24 A
minimum cross-section in main circuit at maximum AC-1 rated value	16 mm <sup>2</sup>
operational current for approx. 200000 operating cycles at AC-4	
<ul> <li>at 400 V rated value</li> </ul>	22 A
at 690 V rated value	18.5 A
operational current	
<ul> <li>at 1 current path at DC-1</li> </ul>	
— at 24 V rated value	55 A
— at 110 V rated value	4.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.4 A
<ul><li>— at 600 V rated value</li><li>• with 2 current paths in series at DC-1</li></ul>	0.25 A
with 2 current paths in series at DC-1  — at 24 V rated value	55 A
— at 24 v rated value  — at 110 V rated value	45 A
— at 220 V rated value	5 A
— at 440 V rated value	1A
— at 600 V rated value	0.8 A
• with 3 current paths in series at DC-1	
— at 24 V rated value	55 A
— at 110 V rated value	55 A
— at 220 V rated value	45 A
— at 440 V rated value	2.9 A
— at 600 V rated value	1.4 A
operational current	
<ul> <li>at 1 current path at DC-3 at DC-5</li> </ul>	
— at 24 V rated value	35 A
— at 110 V rated value	2.5 A
— at 220 V rated value	1 A
<ul> <li>at 440 V rated value</li> </ul>	0.1 A

— at 600 V rated value	0.06 A
<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>	
— at 24 V rated value	55 A
— at 110 V rated value	25 A
— at 220 V rated value	5 A
— at 440 V rated value	0.27 A
— at 600 V rated value	0.16 A
<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul>	
— at 24 V rated value	55 A
— at 110 V rated value	55 A
— at 220 V rated value	25 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.35 A
operating power	
<ul> <li>at AC-2 at 400 V rated value</li> </ul>	18.5 kW
• at AC-3	
— at 230 V rated value	11 kW
— at 400 V rated value	18.5 kW
— at 500 V rated value	22 kW
— at 690 V rated value	22 kW
operating power for approx. 200000 operating cycles	
at AC-4	
at 400 V rated value	11.6 kW
<ul> <li>at 690 V rated value</li> </ul>	16.8 kW
operating apparent power at AC-6a	
up to 230 V for current peak value n=20 rated value	14.5 kV·A
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	25.2 kV·A
<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	31.6 kV·A
<ul> <li>up to 690 V for current peak value n=20 rated value</li> </ul>	28.6 kV·A
operating apparent power at AC-6a	
up to 230 V for current peak value n=30 rated value	9.6 kV·A
• up to 400 V for current peak value n=30 rated value	16.8 kV·A
• up to 500 V for current peak value n=30 rated value	21 kV·A
up to 690 V for current peak value n=30 rated value	28.6 kV·A
short-time withstand current in cold operating state	20.0 KV //
up to 40 °C	
<ul> <li>limited to 1 s switching at zero current maximum</li> </ul>	843 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	596 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 10 s switching at zero current maximum</li> </ul>	400 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 30 s switching at zero current maximum</li> </ul>	241 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 60 s switching at zero current maximum</li> </ul>	196 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at AC	5 000 1/h
operating frequency	
operating frequency  ● at AC-1 maximum	1 200 1/h
• at AC-1 maximum	
<ul><li>at AC-1 maximum</li><li>at AC-2 maximum</li></ul>	750 1/h
<ul><li>at AC-1 maximum</li><li>at AC-2 maximum</li><li>at AC-3 maximum</li></ul>	750 1/h 1 000 1/h
<ul> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> </ul>	750 1/h
<ul> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> </ul> Control circuit/ Control	750 1/h 1 000 1/h 300 1/h
<ul> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> </ul> Control circuit/ Control type of voltage of the control supply voltage	750 1/h 1 000 1/h
at AC-1 maximum     at AC-2 maximum     at AC-3 maximum     at AC-4 maximum  Control circuit/ Control  type of voltage of the control supply voltage control supply voltage at AC	750 1/h 1 000 1/h 300 1/h AC
<ul> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> </ul> Control circuit/ Control type of voltage of the control supply voltage <ul> <li>control supply voltage at AC</li> <li>at 50 Hz rated value</li> </ul>	750 1/h 1 000 1/h 300 1/h
at AC-1 maximum at AC-2 maximum at AC-3 maximum at AC-4 maximum  control circuit/ Control type of voltage of the control supply voltage control supply voltage at AC at 50 Hz rated value operating range factor control supply voltage rated	750 1/h 1 000 1/h 300 1/h AC
at AC-1 maximum at AC-2 maximum at AC-3 maximum at AC-4 maximum  Control circuit/ Control type of voltage of the control supply voltage control supply voltage at AC at 50 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC	750 1/h 1 000 1/h 300 1/h AC 110 V
at AC-1 maximum  at AC-2 maximum  at AC-3 maximum  at AC-4 maximum  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage at AC  at 50 Hz rated value  operating range factor control supply voltage rated value of magnet coil at AC  at 50 Hz	750 1/h 1 000 1/h 300 1/h AC
<ul> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> </ul> Control circuit/ Control type of voltage of the control supply voltage control supply voltage at AC <ul> <li>at 50 Hz rated value</li> </ul> operating range factor control supply voltage rated value of magnet coil at AC <ul> <li>at 50 Hz</li> </ul> apparent pick-up power of magnet coil at AC	750 1/h 1 000 1/h 300 1/h AC 110 V  0.8 1.1
at AC-1 maximum at AC-2 maximum at AC-3 maximum at AC-4 maximum  at AC-4 maximum  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage at AC at 50 Hz rated value  operating range factor control supply voltage rated value of magnet coil at AC at 50 Hz  apparent pick-up power of magnet coil at AC at 50 Hz	750 1/h 1 000 1/h 300 1/h AC 110 V
at AC-1 maximum at AC-2 maximum at AC-3 maximum at AC-4 maximum  control circuit/ Control type of voltage of the control supply voltage control supply voltage at AC at 50 Hz rated value operating range factor control supply voltage rated value of magnet coil at AC at 50 Hz apparent pick-up power of magnet coil at AC at 50 Hz inductive power factor with closing power of the coil	750 1/h 1 000 1/h 300 1/h  AC 110 V  0.8 1.1 190 V·A
at AC-1 maximum at AC-2 maximum at AC-3 maximum at AC-4 maximum  at AC-4 maximum  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage at AC at 50 Hz rated value  operating range factor control supply voltage rated value of magnet coil at AC at 50 Hz  apparent pick-up power of magnet coil at AC at 50 Hz  inductive power factor with closing power of the coil at 50 Hz	750 1/h 1 000 1/h 300 1/h AC 110 V  0.8 1.1
at AC-1 maximum at AC-2 maximum at AC-3 maximum at AC-4 maximum  control circuit/ Control  type of voltage of the control supply voltage control supply voltage at AC at 50 Hz rated value  operating range factor control supply voltage rated value of magnet coil at AC at 50 Hz  apparent pick-up power of magnet coil at AC at 50 Hz  inductive power factor with closing power of the coil	750 1/h 1 000 1/h 300 1/h  AC 110 V  0.8 1.1 190 V·A

inductive power factor with the holding power of the coll		
• at 50 Fize  • at AC  • at AC  opening delay • at AC  opening delay • at AC  other in the switch operating mechanism  standard A1 - A2  voluntary circuit  mumber of NC contacts for susiliary contacts instantaneous contact contact version at the switch operating mechanism  voluntary circuit  mumber of NC contacts for susiliary contacts instantaneous contact contact version at AC-12 maximum  operational current at AC-12 maximum  a 4 do 00 rated value  a 4 850 V rated value  a 5800 V rated value  a 100 V rated value  a 1	inductive power factor with the holding power of the	
closing delay		0.07
		0.37
opening delay         10 18 ms           arcing time         10 20 ms           control version of the switch operating mechanism         Standard A1 - A2           Auxiliary circuit         Impair of NC contacts for auxiliary contacts instantaneous contact         1           Instantaneous contact         1           operational current at AC-12 maximum         10 A           operational current at AC-15         9           at 23 0V rated value         3 A           at 860 V rated value         10 A           at 480 V rated value         10 A           at 480 V rated value         10 A           at 480 V rated value         6 A           at 480 V rated value         6 A           at 480 V rated value         6 A           at 480 V rated value         10 A           at 280 V rated value         10 A           at 280 V rated value         10 A           at 280 V rated value         10 A           at 380 V rated value         10 A           at 48 V rated value         2A           at 48 V rated value         2A           at 380 V rated value         2A           at 380 V rated value         3A           at 380 V rated value         3A           at 38		
a st AC		10 80 ms
Incomposition   Incompositio		
Auxiliary circuit		
		Standard A1 - A2
instantaneous contact         4           number of NC operational current at AC-15 (and at 230 V rated value)         10 A           a # 230 V rated value         10 A           a # 400 V rated value         3 A           a # 4500 V rated value         1 A           a # 4500 V rated value         1 A           a # 4500 V rated value         1 A           a # 4500 V rated value         6 A           a # 450 V rated value         1 DA           a # 450 V rated value         1 DA           a # 450 V rated value         2 A           a # 450 V rated value         1 DA           a # 450 V rated value         1 DA           a # 450 V rated value         2 A           a # 450 V rated value         3 DA           a # 450 V rated value         4 DA           a # 450 V rated value         4 DA           a # 450 V rated value         4 DA		
instantaneous contact operational current at AC-12 maximum operational current at AC-15	· · · · · · · · · · · · · · · · · · ·	1
Section   Comment   Comm		1
• at 230 V rated value	operational current at AC-12 maximum	10 A
• at 400 V rated value • at 500 V rated value • at 600 V rated value • at 600 V rated value • at 40 V rated value • at 40 V rated value • at 60 V rated value • at 60 V rated value • at 60 V rated value • at 10 V rated value • at 10 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 60 V rated value • at 10 V rated value • at 40 V rated value • at 480 V rated value • at 600 V rated value • at 200 V rated value • for 3-phase AC motor • at 480 V rated value • for 3-phase AC motor • at 200 V rated value • for 3-phase AC motor • at 200 V rated value • for 3-phase AC motor • at 200 V rated value • for 3-phase AC motor • at 200 V rated value • for 5-phase AC motor • at 200 V rated value • for 5-phase AC motor • at 200 V rated value • for 5-phase AC motor • at 200 V rated value • for 5-phase AC motor • at 200 V rated value • for 5-phase AC motor • at 575/600 V rated value • for short-circuit protection of the main circuit • with type of coordination 1 required • for short-circuit protection of the main circuit • with type of coordination 1 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of	operational current at AC-15	
• at 500 V rated value 2 A	at 230 V rated value	10 A
• at 690 V rated value	• at 400 V rated value	3 A
Operational current at DC-12   • at 24 V rated value	at 500 V rated value	2 A
• at 24 V rated value	at 690 V rated value	1 A
• at 48 V rated value 6 A 6 A 6 A 6 A 6 A 6 A 6 A 6 A 6 A 6	operational current at DC-12	
• at 60 V rated value • at 110 V rated value • at 120 V rated value • at 220 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 84 V rated value • at 48 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 24 V rated value • at 25 V rated value • at 25 V rated value • at 26 V rated value • at 26 V rated value • at 26 V rated value • at 600 V rated value • at 220 V rated value • for 3-phase AC motor • at 460/48 V rated value • at 220 V rated value • at 600 V rated value • at 6	at 24 V rated value	10 A
• at 110 V rated value 2 A • at 125 V rated value 2 A • at 125 V rated value 1 A • at 600 V rated value 0.15 A  operational current at DC-13 • at 24 V rated value 2 A • at 60 V rated value 2 A • at 110 V rated value 2 A • at 110 V rated value 3 A • at 125 V rated value 4 A • at 125 V rated value 4 A • at 125 V rated value 5 A • at 60 V rated value 5 A • at 60 V rated value 6 A • at 60 V rated value 7 A • at 600 V rated value 8 A • at 600 V rated value 9 A • at 600 V rated value 9 A • at 600 V rated value 9 A • at 600 V rated value 1 A • for 3-phase AC motor 1 A • at 200/208 V rated value 1 A • for 3-phase AC motor 1 A • at 200/208 V rated value 1 A • for 575/600 V rated value 1 A • for 575/600 V rated value 1 A • at 600 V rated value 1 A • for 575/600 V rated value 1 A • for 575/600 V rated value 1 A • for 50-not-circuit protection of the main circuit 1 A • with type of coordination 1 required 1 A • for short-circuit protection of the main circuit 2 A • for short-circuit protection of the main circuit 2 A • for short-circuit protection of the auxiliary switch in 60 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 63A (415V.80kA) • for short-circuit protection of the auxiliary switch in 60 A (690 V, 100 kA), aM: 50 A (690 V, 100 kA), BS88: 63A (415V.80kA) • for short-circuit protection of the auxiliary switch in 60 A (690 V, 100 kA), aM: 50 A (690 V, 100 kA)	at 48 V rated value	6 A
• at 110 V rated value 2 A • at 125 V rated value 2 A • at 125 V rated value 1 A • at 600 V rated value 0.15 A  operational current at DC-13 • at 24 V rated value 2 A • at 60 V rated value 2 A • at 110 V rated value 2 A • at 110 V rated value 3 A • at 125 V rated value 4 A • at 125 V rated value 4 A • at 125 V rated value 5 A • at 60 V rated value 5 A • at 60 V rated value 6 A • at 60 V rated value 7 A • at 600 V rated value 8 A • at 600 V rated value 9 A • at 600 V rated value 9 A • at 600 V rated value 9 A • at 600 V rated value 1 A • for 3-phase AC motor 1 A • at 200/208 V rated value 1 A • for 3-phase AC motor 1 A • at 200/208 V rated value 1 A • for 575/600 V rated value 1 A • for 575/600 V rated value 1 A • at 600 V rated value 1 A • for 575/600 V rated value 1 A • for 575/600 V rated value 1 A • for 50-not-circuit protection of the main circuit 1 A • with type of coordination 1 required 1 A • for short-circuit protection of the main circuit 2 A • for short-circuit protection of the main circuit 2 A • for short-circuit protection of the auxiliary switch in 60 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 63A (415V.80kA) • for short-circuit protection of the auxiliary switch in 60 A (690 V, 100 kA), aM: 50 A (690 V, 100 kA), BS88: 63A (415V.80kA) • for short-circuit protection of the auxiliary switch in 60 A (690 V, 100 kA), aM: 50 A (690 V, 100 kA)		
	at 110 V rated value	3 A
at 24 V rated value	at 220 V rated value	1 A
at 24 V rated value		
• at 24 V rated value 2 A   • at 48 V rated value 2 A   • at 60 V rated value 1 A   • at 100 V rated value 1 A   • at 110 V rated value 1 A   • at 125 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 600 V rated value 4 A   • at 600 V rated value 4 A   • at 600 V rated value 4 A   • at 600 V rated value 5 A   • at 600 V rated value 5 A   • at 600 V rated value 5 A   • at 230 V rated value 7 A   • at 230 V rated value 7 A   • for 3-phase AC motor 1 A   • at 220/230 V rated value 1 A   • for 3-phase AC motor 1 A   • at 220/230 V rated value 1 A   • for 3-phase AC motor 1 A   • at 220/230 V rated value 1 A   • for 3-phase AC motor 1 A   • at 200/208 V rated value 1 A   • for 3-phase AC motor 1 A   • at 200/208 V rated value 1 A   • for 3-phase AC motor 1 A   • at 460/480 V rated value 1 A   • for 3-phase AC motor 1 A   • at 460/480 V rated value 1 A   • for short-circuit protection of the main circuit 1 A   • for short-circuit protection of the main circuit 2   • for short-circuit protection of the main circuit 3   • for short-circuit protection of the auxiliary switch 1   • for short-circuit protection of the auxiliary switch 1   • for short-circuit protection of the auxiliary switch 1   • for short-circuit protection of the auxiliary switch 1   • for short-circuit protection of the auxiliary switch 1   • for short-circuit protection of the auxiliary switch 1   • for short-circuit protection of the auxiliary switch 1   • for short-circuit protection of the auxiliary switch 1   • for short-circuit protection of the auxiliary switch 1   • for short-circuit protection of the auxiliary switch 1   • for short-circuit protection of the auxiliary switch 1   • for short-circuit protection of the auxiliary switch 1   • for short-circuit protection of the auxiliary switch 1   • for short-circuit protection of the auxiliary switch 1   • for short-c		
at 48 V rated value at 60 V rated value at 110 V rated value at 110 V rated value at 110 V rated value at 25 V rated value at 220 V rated value at 600 V rated value  Industry switching per 100 million (17 V, 1 mA)  Industry switch value  Industry swi	•	10 A
e at 60 V rated value e at 110 V rated value 1 A 0.9 A 0.9 A 0.3 A 0.1 A contact reliability of auxiliary contacts  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor 0.1 4 A 1 faulty switching per 100 million (17 V, 1 mA)  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor 0.1 4 A 1 faulty switching per 100 million (17 V, 1 mA)  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor 0.1 4 80 V rated value 0.1 A 1 faulty switching per 100 million (17 V, 1 mA)  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor 0.1 4 80 V rated value 0.1 A 0 A 0 A 0 A 0 A 0 A 0 A 0 A 0 A 0 A 0		
<ul> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> <li>o.1 A</li> <li>contact reliability of auxiliary contacts</li> <li>1 faulty switching per 100 million (17 V, 1 mA)</li> </ul> UL/CSA ratings full-load current (FLA) for 3-phase AC motor <ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>for single-phase AC motor</li> <li>at 110/120 V rated value</li> <li>for 3-phase AC motor</li> <li>at 230 V rated value</li> <li>for 3-phase AC motor</li> <li>at 220/208 V rated value</li> <li>at 220/208 V rated value</li> <li>at 460/480 V rated value</li> <li>at 460/480 V rated value</li> <li>at 460/480 V rated value</li> <li>at 5 hp</li> <li>at 460/480 V rated value</li> <li>at 5 hp</li> <li>at 460/480 V rated value</li> <li>by a 15 hp</li> <li>at 460/480 V rated value</li> <li>at 575/600 V rated value</li> <li>40 hp</li> </ul> contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link <ul> <li>for short-circuit protection of the main circuit</li> <li>with type of assignment 2 required</li> <li>for short-circuit protection of the auxiliary switch required</li> <li>for short-circuit protection of the auxiliary switch</li> <li>gG: 10 A (500 V, 10A), aM: 50A (690 V, 100 AA), BS88: 63A (415V,80A)</li> <li< td=""><td></td><td></td></li<></ul>		
at 125 V rated value at 220 V rated value at 600 V rated value  at 600 V rated value  at 600 V rated value  other teliability of auxiliary contacts  I faulty switching per 100 million (17 V, 1 mA)   JUCSA 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 at 600 V rated value  at 1010/120 V rated value  - at 110/120 V rated value - at 230 V rated value - at 230 V rated value - at 220/230 V rated value - at 220/230 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 757/600 V rated value - at 600 / P600  Short-circuit protection  design of the fuse link for short-circuit protection of the main circuit - with type of assignment 2 required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required installation/mounting/dimensions		
• 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)  JL/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  40 A  41 A  yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value  5 for 3-phase AC motor — at 220/2208 V rated value — at 220/2208 V rated value — at 460/480 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 — at 675/600 V rated value — at 675/600 V rated value — with fype of coordination 1 required • for short-circuit protection  design of the fuse link • for short-circuit protection of the main circuit — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required installation/ mounting/ dimensions		
• at 600 V rated value  contact reliability of auxiliary contacts  DL/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  pielded mechanical performance [hp] • 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 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 — with rype of coordination 1 required — with type of coordination 1 required • for short-circuit protection of the main circuit — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required installation/ mounting/ dimensions		
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 100/120 V rated value  — 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 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 — at 600 / P600  Short-circuit protection  design of the fuse link • for short-circuit protection of the main circuit — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required installation/ mounting/ dimensions		
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value • at 600 V rated value • at 100 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  • for 3-phase AC motor  — at 200/208 V rated value — at 220/230 V rated value — at 220/230 V rated value — at 220/230 V rated value — at 2575/600 V rated value — at 575/600 V rated value  contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required • for short-circuit protection of the auxiliary switch required  • for short-circuit protection of the auxiliary switch required installation/ mounting/ dimensions		C
full-load current (FLA) for 3-phase AC motor		Tracity switching per 100 million (17 V, 1 mill)
<ul> <li>at 480 V rated value</li> <li>40 A</li> <li>at 600 V rated value</li> <li>41 A</li> <li>yielded mechanical performance [hp]</li> <li>for single-phase AC motor</li></ul>		
* at 600 V rated value  yielded mechanical performance [hp]     * for single-phase AC motor		40 A
yielded mechanical performance [hp]  • 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 — with type of coordination 1 required — with type of coordination 1 required • for short-circuit protection of the main circuit — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required		
<ul> <li>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 — with type of coordination 1 required — with type of coordination 1 required — with type of assignment 2 required — for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions</li> <li>3 hp  7.5 hp  10 hp  12 hp  13 hp  7.5 hp  40 hp  40 hp  A600 / P600  A600 / P600  Geria 160 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 kA)  geria 160 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 63A (415V,80kA)  geria 10 A (500 V, 1 kA)</li> </ul>		
- at 110/120 V rated value - at 230 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 - A600 / P600  Short-circuit protection  design of the fuse link - for short-circuit protection of the main circuit - with type of coordination 1 required - with type of assignment 2 required - with type of assignment 2 required - for short-circuit protection of the auxiliary switch required - for short-circuit protection of the auxiliary switch required - stallation/ mounting/ dimensions		2 ha
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          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         — with type of assignment 2 required         — with type of assignment 2 required         — for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions		·
- 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 40 hp  contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link  • for short-circuit protection of the main circuit - with type of coordination 1 required  • for short-circuit protection of the auxiliary switch required  • for short-circuit protection of the auxiliary switch required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions		ηι σ. τ
- at 220/230 V rated value - at 460/480 V rated value 30 hp 40 hp  contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link  • for short-circuit protection of the main circuit - with type of coordination 1 required  • for short-circuit protection of the main circuit gG: 160 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 kA)  - with type of assignment 2 required • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions	•	40 hm
- at 460/480 V rated value  - at 575/600 V rated value  40 hp  A600 / P600  Short-circuit protection  design of the fuse link  • for short-circuit protection of the main circuit  - with type of coordination 1 required  • for short-circuit protection of the auxiliary switch required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions		·
- at 575/600 V rated value  contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link  • for short-circuit protection of the main circuit  - with type of coordination 1 required  • for short-circuit protection of the auxiliary switch required  of the fuse link  gG: 160 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 kA)  gG: 80A (690V,100kA), aM: 50A (690V,100kA), BS88: 63A (415V,80kA)  gG: 10 A (500 V, 1 kA)		
contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link  • for short-circuit protection of the main circuit  — with type of coordination 1 required  • for short-circuit protection of the main circuit  — with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  A600 / P600  A600 / P600   G: 160 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 kA)  G: 80A (690 V, 100 kA), aM: 50A (690 V, 100 kA), BS88: 63A (415 V, 80 kA)  G: 10 A (500 V, 1 kA)		
design of the fuse link  • for short-circuit protection of the main circuit  — with type of coordination 1 required  — with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  gG: 160 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 kA)  gG: 80A (690V,100kA), aM: 50A (690V,100kA), BS88: 63A (415V,80kA)  gG: 10 A (500 V, 1 kA)		
design of the fuse link  • for short-circuit protection of the main circuit  — with type of coordination 1 required  — with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  gG: 160 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 kA)  gG: 80A (690V,100kA), aM: 50A (690V,100kA), BS88: 63A (415V,80kA)  gG: 10 A (500 V, 1 kA)		A000 / P000
<ul> <li>for short-circuit protection of the main circuit         <ul> <li>with type of coordination 1 required</li> <li>with type of assignment 2 required</li> <li>for short-circuit protection of the auxiliary switch required</li> </ul> </li> <li>for short-circuit protection of the auxiliary switch required</li> </ul> <li>for short-circuit protection of the auxiliary switch required</li>		
<ul> <li>— with type of coordination 1 required</li> <li>— with type of assignment 2 required</li> <li>• for short-circuit protection of the auxiliary switch required</li> <li>gG: 160 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 kA)</li> <li>gG: 80A (690V,100kA), aM: 50A (690V,100kA), BS88: 63A (415V,80kA)</li> <li>gG: 10 A (500 V, 1 kA)</li> </ul>		
<ul> <li>— with type of assignment 2 required</li> <li>● for short-circuit protection of the auxiliary switch required</li> <li>Installation/ mounting/ dimensions</li> <li>V, 80 kA)</li> <li>gG: 80A (690V,100kA), aM: 50A (690V,100kA), BS88: 63A (415V,80kA)</li> <li>gG: 10 A (500 V, 1 kA)</li> </ul>		
for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  gG: 10 A (500 V, 1 kA)  gG: 10 A (500 V, 1 kA)	<ul> <li>— with type of coordination 1 required</li> </ul>	
required Installation/ mounting/ dimensions		gG: 80A (690V,100kA), aM: 50A (690V,100kA), BS88: 63A (415V,80kA)
nstallation/ mounting/ dimensions		gG: 10 A (500 V, 1 kA)
	·	
mounting position +/-180° rotation possible on vertical mounting surface; can be tilted		
	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 standard mounting rail
•	according to DIN EN 60715
side-by-side mounting	Yes
height	114 mm
width	55 mm
depth	130 mm
required spacing	
<ul><li>with side-by-side mounting</li></ul>	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
<ul><li>for grounded parts</li></ul>	
— forwards	10 mm
— upwards	10 mm
— at the side	6 mm
— downwards	10 mm
for live parts	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	6 mm
Connections/ Terminals	
type of electrical connection	
for main current circuit	screw-type terminals
at contactor for auxiliary contacts	Screw-type terminals
of magnet coil	Screw-type terminals
type of connectable conductor cross-sections	
• for main contacts	
— solid or stranded	2x (1 35 mm²), 1x (1 50 mm²)
— finely stranded with core end processing	2x (1 25 mm²), 1x (1 35 mm²)
at AWG cables for main contacts	2x (18 2), 1x (18 1)
connectable conductor cross-section for main contacts	
finely stranded with core end processing	1 35 mm²
connectable conductor cross-section for auxiliary	7 00 Hilli
contacts	
solid or stranded	0.5 2.5 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm <sup>2</sup>
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid or stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)
— 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	18 1
for auxiliary contacts	20 14
Safety related data	
B10 value with high demand rate acc. to SN 31920	1 000 000
proportion of dangerous failures	
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	40 %
with high demand rate acc. to SN 31920	73 %
failure rate [FIT] with low demand rate acc. to SN 31920	100 FIT
T1 value for proof test interval or service life acc. to IEC 61508	20 y
protection class IP on the front acc. to IEC 60529	IP20
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front
suitability for use	
<ul> <li>safety-related switching OFF</li> </ul>	Yes

## **General Product Approval**





Confirmation



<u>KC</u>



**EMC** 

Functional Safety/Safety of Machinery

**Declaration of Conformity** 

**Test Certificates** 



Type Examination Certificate UK Declaration of Conformity



Special Test Certificate Type Test Certificates/Test Report

## Marine / Shipping













Marine / Shipping

other

**Dangerous Good** 



Confirmation

Confirmation

<u>Transport Information</u>

## **Further information**

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=3RT2035-1AF00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2035-1AF00

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2035-1AF00

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

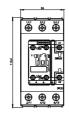
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2035-1AF00&lang=en

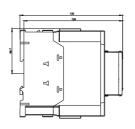
Characteristic: Tripping characteristics, I2t, Let-through current

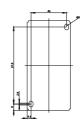
https://support.industry.siemens.com/cs/ww/en/ps/3RT2035-1AF00/char

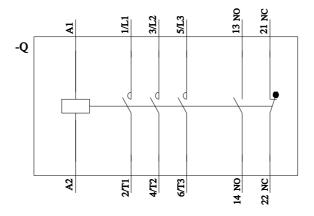
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2035-1AF00&objecttype=14&gridview=view1









last modified: 12/21/2020 ☑