# **SIEMENS**

Data sheet 3RT2023-1AB00



power contactor, AC-3 9 A, 4 kW / 400 V 1 NO + 1 NC, 24 V AC, 50 Hz 3-pole, Size S0 screw terminal

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S0
product extension	
<ul> <li>function module for communication</li> </ul>	No
<ul> <li>auxiliary switch</li> </ul>	Yes
power loss [W] for rated value of the current at AC in hot operating state	1.2 W
• per pole	0.4 W
power loss [W] for rated value of the current without load current share typical	7.6 W
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 acc. to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at AC	7,5g / 5 ms, 4,7g / 10 ms
shock resistance with sine pulse	
• at AC	11,8g / 5 ms, 7,4g / 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)	01.10.2009 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
during storage	-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	40.4
<ul> <li>at AC-1 at 400 V at ambient temperature 40 °C rated value</li> </ul>	40 A
• at AC-1	
<ul> <li>— up to 690 V at ambient temperature 40 °C rated value</li> </ul>	40 A
— up to 690 V at ambient temperature 60 $^{\circ}$ C rated value	35 A
• at AC-3	
— at 400 V rated value	9 A
— at 500 V rated value	9 A
— at 690 V rated value	9 A
<ul> <li>at AC-4 at 400 V rated value</li> </ul>	8.5 A
<ul> <li>at AC-5a up to 690 V rated value</li> </ul>	35.2 A
<ul> <li>at AC-5b up to 400 V rated value</li> </ul>	7.4 A
• at AC-6a	
<ul> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	11.4 A
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	11.4 A
<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	9.1 A
<ul> <li>up to 690 V for current peak value n=20 rated value</li> <li>at AC-6a</li> </ul>	9 A
up to 230 V for current peak value n=30 rated value	7.6 A
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	7.6 A
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	6.1 A
— up to 690 V for current peak value n=30 rated value	6.1 A
minimum cross-section in main circuit at maximum AC-1 rated value	10 mm²
operational current for approx. 200000 operating cycles at AC-4	
<ul> <li>at 400 V rated value</li> </ul>	4.1 A
at 690 V rated value	3.3 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 — at 600 V rated value	0.4 A 0.25 A
	0.25 A
<ul> <li>with 2 current paths in series at DC-1</li> <li>at 24 V rated value</li> </ul>	35 A
— at 110 V rated value	35 A
— at 220 V rated value	5 A
— at 440 V rated value	1 A
— at 600 V rated value	0.8 A
with 3 current paths in series at DC-1	
— at 24 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	35 A
— at 440 V rated value	2.9 A
— at 600 V rated value	1.4 A
operational current	
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	20 A

— at 110 V rated value	2.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.09 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	35 A
— at 110 V rated value	15 A
— at 220 V rated value	3 A
— at 440 V rated value	0.27 A
— at 600 V rated value	0.16 A
<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul>	
— 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	2.2 kW
— at 400 V rated value	4 kW
— at 500 V rated value	4 kW
— at 690 V rated value	7.5 kW
operating power for approx. 200000 operating cycles	
at AC-4	
<ul> <li>at 400 V rated value</li> </ul>	2 kW
at 690 V rated value	2.5 kW
operating apparent power at AC-6a	
<ul> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	4.5 kV·A
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	7.8 kV·A
<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	7.8 kV·A
up to 690 V for current peak value n=20 rated value	10.7 kV·A
operating apparent power at AC-6a	
<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	3 kV·A
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	5.2 kV·A
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	5.2 kV·A
up to 690 V for current peak value n=30 rated value	7.2 kV·A
short-time withstand current in cold operating state up to 40 °C	
Iimited to 1 s switching at zero current maximum	170 A: Use minimum cross section acc. to AC 1 rated value
<ul> <li>limited to 1's switching at zero current maximum</li> <li>limited to 5 s switching at zero current maximum</li> </ul>	170 A; Use minimum cross-section acc. to AC-1 rated value 170 A; Use minimum cross-section acc. to AC-1 rated value
Ilmitted to 5's switching at zero current maximum     Ilmitted to 10 s switching at zero current maximum	122 A; Use minimum cross-section acc. to AC-1 rated value
	78 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> </ul>	68 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	OO A, OSC MINIMUM GIOSS-SECTION ACC. TO AC-1 TATEU VALUE
at AC	5 000 1/h
operating frequency	V 000 1/11
at AC-1 maximum	1 000 1/h
• at AC-2 maximum	1 000 1/h
• at AC-3 maximum	1 000 1/h
• at AC-4 maximum	300 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
at 50 Hz rated value	24 V
operating range factor control supply voltage rated value of magnet coil at AC	
● at 50 Hz	0.8 1.1
apparent pick-up power of magnet coil at AC	
● at 50 Hz	65 V·A

apparent holding power of magnet coll at AC  at 50 Hz  closing detay  at AC  arcing time  control version of the switch operating mechanism  control version of	inductive power factor with closing power of the coil	
a st 50 Hz		0.82
Inductive power factor with the holding power of the coll  a 150 Hz  closing delay  a 1 AC  opening delay  a 1 AC  arcing time  a 10 — 10 ms  Standard A1 - A2  Auxiliary circuit  Instantaneous contact for auxiliary contacts Instantaneous contact Instantaneous cont		
a   15 0   1/2   0.25     closing delay   a   1 AC   8   40 ms     opening delay   a   1 AC   4   16 ms     a   a   a   C   a   16 ms     a   a   a   C   a   16 ms     a   a   a   a   a   a   a     a   a		_ 7.6 V·A
■ at 50 Hz  closing delay ■ at AC  opening delay ■ at AC  arcing time 10 10 ms  control version of the switch operating mechanism  Auxiliarry circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NC contacts for auxiliary contacts instantaneous contact  number of NC contacts for auxiliary contacts instantaneous contact  1		
Accord   Section   Control of the switch operating mechanism   10		0.05
e at AC opening delay		0.25
opening delay		0 40
arcing time control version of the switch operating mechanism Auxiliary circuit instantaneous contact operational current at AC-12 maximum operational current at AC-18  at 230 V rated value		8 40 ms
arcing time		4 40
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 instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum  operational current at AC-13 maximum  operational current at AC-13 maximum  at 400 V rated value  at 400 V rated value  at 400 V rated value  at 600 V rated value  at 80 V rated value  at 48 V rated value  at 48 V rated value  at 48 V rated value  at 100 V rated value  at 100 V rated value  at 100 V rated value  at 220 V rated value  at 48 V rated value  at 48 V rated value  at 220 V rated value  at 48 V rated value  at 58 OV rated value  at 58 OV rated value  at 58 OV rated value  at 50 V rated value  at 60 V rated valu		
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact poperational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value • at 400 V rated value • at 600 V rated value • at 600 V rated value • at 850 V rated value • at 850 V rated value • at 80 V rated value • at 80 V rated value • at 80 V rated value • at 600 V rated value • at 6		Standard A1 - A2
instantaneous contact national current at AC-12 maximum  operational current at AC-15  • at 230 V rated value • at 500 V rated value • at 600 V rated value • at 80 V rated value • 6 A • at 110 V rated value • at 80 V rated value • at 10 V rated value • at 10 V rated value • at 220 V rated value • at 220 V rated value • at 80 V rated value • at 110 V rated value • at 10 V rated value • at 10 V rated value • at 60 V		
instantaneous contact operational current at AC-15 maximum  operational current at AC-15  • at 230 V rated value • at 4500 V rated value • at 6500 V rated value • at 125 V rated value • at 126 V rated value • at 120 V rated value • at 1200 V rated value •		1
a t 230 V rated value		1
at 230 V rated value     at 400 V rated value     at 400 V rated value     at 500 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 100 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 48 V rated value     at 60 V rated value     at 48 V rated value     at 60 V rat	operational current at AC-12 maximum	10 A
	operational current at AC-15	
	• 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 500 V rated value	2 A
	at 690 V rated value	1 A
	operational current at DC-12	
at 160 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 48 V rated value     at 48 V rated value     at 175 V rated value     at 180 V rated value     at 110 V rated value     at 125 V rated value     at 125 V rated value     at 120 V rated value     at 120 V rated value     at 180 V rated value     at 600 V rated value     at 600 V rated value     at 480 V rated value     at 280 V rated value     at 180 V rated value     at 280 V rated value     at 110/120 V rated value     at 110/120 V rated value     at 220/230 V rated value     at 280 V rated value     at 38 V rated value     at 280 V rated value     at 38 V rated value     at 48 V rated value     at 280 V rated value     at 38 V rated value     at 48 V rated value     at 48 V rated value     at 48 V rated value     at 575/600 V rated value	<ul> <li>at 24 V rated value</li> </ul>	10 A
at 110 V rated value     at 125 V rated value     at 200 V rated value     at 800 V rated value     at 800 V rated value     operational current at DC-13     at 24 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 120 V rated value     at 800 V rated value     at 100 V rated value     at 200 V rated value     at 600 V rated value     yelded mechanical performance [hp]     • for single-phase AC motor     —at 230 V rated value     at 600 V rated value     at 200/230 V rated value     at 600 V rated value     at 600 V rated value     at 200/230 V rated value     at 600/480 V rated value     at 600/480 V rated value     at 575/600 V rated value     at 575/600 V rated value     at 575/600 V rated value     at 600/480 V rated value     at 600/480 V rated value     at 600/480 V rated value     A600 / P600  Short-circuit protection  design of the fuse link     • for short-circuit protection of the main circuit	<ul> <li>at 48 V rated value</li> </ul>	6 A
	<ul> <li>at 60 V rated value</li> </ul>	6 A
	• at 110 V rated value	3 A
at 600 V rated value  operational current at DC-13  at 48 V rated value  at 46 V rated value  at 60 V rated value  at 10 V rated value  at 22 V rated value  at 600 V rated value  at 48 V rated value  at 600 V rated value  be for single-phase AC motor  at 110/120 V rated value  for 3-phase AC motor  at 220/230 V rated value  at 260/38 V rated value  at 260/480 V rated value  at 460/480 V rated value  at 575/600 V	at 125 V rated value	2 A
operational current at DC-13  • 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 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 800 V rated value • at 600 V rated value • at 480 V rated value • at 480 V rated value • at 600 V rated value • at 230 V rated value • at 230 V rated value • at 250 V rated value • at 250 V rated value • for 3-phase AC motor — at 200/208 V rated value • at 460/480 V rated value — at 450/480 V rated value — at 450/480 V rated value — at 575/600 V rated value — At 5	at 220 V rated value	1 A
	• at 600 V rated value	0.15 A
<ul> <li>at 48 V rated value</li> <li>at 60 V rated value</li> <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>at 480 V rated value</li> <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>at 110/120 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/230 V rated value</li> <li>at 200/230 V rated value</li> <li>at 200/300 V rated value</li> <li>at 55/5/600 V rated value</li> <li>5 hp</li> <li>at 460/480 V rated value</li> <li>at 575/600 V rated value</li> <li>7.5 hp</li> <li>contact rating of auxiliary contacts according to UL</li> <li>Short-circuit protection</li> <li>design of the fuse link</li> <li>for short-circuit protection of the main circuit</li> </ul>	operational current at DC-13	
<ul> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</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>for single-phase AC motor</li> <li>at 110/120 V rated value</li> <li>at 110/120 V rated value</li> <li>for single-phase AC motor</li> <li>at 230 V rated value</li> <li>for 3-phase AC motor</li> <li>at 220/230 V rated value</li> <li>at 220/230 V rated value</li> <li>at 220/230 V rated value</li> <li>at 260/480 V rated value</li> <li>at 460/480 V rated value</li> <li>at 5 hp</li> <li>at 575/600 V rated value</li> <li>bhp</li> <li>at 575/600 V rated value</li> <li>A600 / P600</li> </ul> Short-circuit protection design of the fuse link <ul> <li>for short-circuit protection of the main circuit</li> </ul>	<ul><li>at 24 V rated value</li></ul>	10 A
<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>0.1 A</li> <li>contact reliability of auxiliary contacts</li> <li>1 faulty switching per 100 million (17 V, 1 mA)</li> <li>UL/CSA ratings</li> <li>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>for single-phase AC motor</li> <li>at 110/120 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 200/208 V rated value</li> <li>at 200/208 V rated value</li> <li>at 460/480 V rated value</li> <li>at 460/480 V rated value</li> <li>5 hp</li> <li>at 575/600 V rated value</li> <li>7.5 hp</li> </ul> </li> <li>contact rating of auxiliary contacts according to UL</li> <li>Short-circuit protection</li> <li>design of the fuse link</li> <li>for short-circuit protection of the main circuit</li> </ul>	● at 48 V rated value	2 A
at 125 V rated value at 220 V rated value 3.3 A at 600 V rated value 2.1 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 at 600 V rated value 5 A at 600 V rated value 9 A  yielded mechanical performance [hp] for single-phase AC motor - at 110/120 V rated value 1 hp - at 230 V rated value 1 hp for 3-phase AC motor - at 200/208 V rated value 2 hp - at 200/208 V rated value 3 hp - at 460/480 V rated value - at 575/600 V rated value 7.5 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	at 60 V rated value	2 A
at 125 V rated value at 220 V rated value 3.3 A at 600 V rated value 2.1 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 at 600 V rated value 5 A at 600 V rated value 9 A  yielded mechanical performance [hp] for single-phase AC motor - at 110/120 V rated value 1 hp - at 230 V rated value 1 hp for 3-phase AC motor - at 200/208 V rated value 2 hp - at 200/208 V rated value 3 hp - at 460/480 V rated value - at 575/600 V rated value 7.5 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		1 A
<ul> <li>at 220 V rated value</li> <li>at 600 V rated value</li> <li>0.1 A</li> <li>contact reliability of auxiliary contacts</li> <li>1 faulty switching per 100 million (17 V, 1 mA)</li> <li>UL/CSA ratings</li> <li>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>9 A</li> </ul> </li> <li>yielded mechanical performance [hp] <ul> <li>for single-phase AC motor</li> <li>at 110/120 V rated value</li> <li>hp</li> <li>at 230 V rated value</li> <li>for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>at 200/208 V rated value</li> <li>at 460/480 V rated value</li> <li>at 460/480 V rated value</li> <li>bp</li> <li>at 575/600 V rated value</li> <li>5 hp</li> <li>at 575/600 V rated value</li> <li>7.5 hp</li> </ul> </li> <li>contact rating of auxiliary contacts according to UL</li> <li>Short-circuit protection</li> <li>design of the fuse link</li> <li>for short-circuit protection of the main circuit</li> </ul>	at 125 V rated value	0.9 A
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  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 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 fuse link  for short-circuit protection of the main circuit		
contact reliability of auxiliary contacts  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  • at 600 V rated value  9 A  yielded mechanical performance [hp]  • for single-phase AC motor  — at 110/120 V rated value  1 hp  — at 230 V rated value  1 hp  • for 3-phase AC motor  — at 200/208 V rated value  2 hp  — at 220/230 V rated value  3 hp  — 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 fuse link  • for short-circuit protection of the main circuit		
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  9 A  yielded mechanical performance [hp]  • for single-phase AC motor  — at 110/120 V rated value  1 hp  — at 230 V rated value  1 hp  • for 3-phase AC motor  — at 200/208 V rated value  2 hp  — at 220/230 V rated value  3 hp  — 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 fuse link • for short-circuit protection of the main circuit		
full-load current (FLA) for 3-phase AC motor		readily officially por 100 million (17 V, 1 mill)
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  To 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	-	
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 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		7.6 A
yielded mechanical performance [hp]  • for single-phase AC motor  — at 110/120 V rated value — at 230 V rated value 1 hp  • for 3-phase AC motor — at 200/208 V rated value 2 hp — at 220/230 V rated value 3 hp — at 460/480 V rated value 5 hp — at 575/600 V rated value 7.5 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		
<ul> <li>for single-phase AC motor  — at 110/120 V rated value — at 230 V rated value 1 hp  for 3-phase AC motor — at 200/208 V rated value 2 hp — at 220/230 V rated value 3 hp — at 460/480 V rated value 5 hp — at 575/600 V rated value 7.5 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</li> </ul>		
- at 110/120 V rated value - at 230 V rated value 1 hp  • for 3-phase AC motor - at 200/208 V rated value 2 hp - at 220/230 V rated value 3 hp - at 460/480 V rated value 5 hp - at 575/600 V rated value 7.5 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		
- at 230 V rated value  • for 3-phase AC motor  - at 200/208 V rated value 2 hp  - at 220/230 V rated value 3 hp  - at 460/480 V rated value 5 hp  - at 575/600 V rated value 7.5 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		1 hp
for 3-phase AC motor         — at 200/208 V rated value		·
- at 200/208 V rated value 2 hp - at 220/230 V rated value 3 hp - at 460/480 V rated value 5 hp - at 575/600 V rated value 7.5 hp  contact rating of auxiliary contacts according to UL A600 / P600  Short-circuit protection  design of the fuse link • for short-circuit protection of the main circuit		
- at 220/230 V rated value 3 hp - at 460/480 V rated value 5 hp - at 575/600 V rated value 7.5 hp  contact rating of auxiliary contacts according to UL A600 / P600  Short-circuit protection  design of the fuse link • for short-circuit protection of the main circuit	·	2 hp
- at 460/480 V rated value 5 hp - at 575/600 V rated value 7.5 hp  contact rating of auxiliary contacts according to UL A600 / P600  Short-circuit protection  design of the fuse link • for short-circuit protection of the main circuit		·
— at 575/600 V rated value 7.5 hp  contact rating of auxiliary contacts according to UL A600 / P600  Short-circuit protection  design of the fuse link  • for short-circuit protection of the main circuit		
contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link  • for short-circuit protection of the main circuit		
Short-circuit protection  design of the fuse link  • for short-circuit protection of the main circuit		
design of the fuse link  • for short-circuit protection of the main circuit		7,000,1,000
for short-circuit protection of the main circuit		
	•	
— with type of coordination i required gg. 63A (690V, ToukA), aM: 32A (690V, ToukA), BS88: 63A (415V,80KA)		aC+62A (600\/ 100\A) aM+22A (600\/ 100\A) BC00, 62A (44E\/ 00\A)
	— with type of coordination 1 required	96. 03A (090V, 100KA), aivi. 32A (090V, 100KA), BS88: 03A (475V,80KA)

— with type of assignment 2 required	gG: 25A (690V,100kA), aM: 20A (690V,100kA), BS88: 25A (415V,80kA)
• for short-circuit protection of the auxiliary switch	gG: 10 A (500 V, 1 kA)
required Installation/ mounting/ dimensions	
	+/-180° rotation possible on vertical mounting surface; can be tilted
mounting position	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	85 mm
width	45 mm
depth	97 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
for grounded parts	
— forwards	10 mm
— upwards	10 mm
— at the side	6 mm
— downwards	10 mm
• for live parts	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	6 mm
Connections/ Terminals	Othin
type of electrical connection	covery have terreined
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	0 (4 0 5 0) 0 (0 5 40 0)
— solid	2x (1 2.5 mm²), 2x (2.5 10 mm²)
— solid or stranded	2x (1 2,5 mm²), 2x (2,5 10 mm²)
— finely stranded with core end processing	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
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	
solid or stranded	0.5 2.5 mm²
	0.5 2.5 mm²
finely stranded with core end processing  type of connectable conductor cross sections	- U.J Z.J IIIII
type of connectable conductor cross-sections	
for auxiliary contacts      colid or stranded	2v (0.5 1.5 mm²) 2v (0.75 2.5 mm²)
— 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	16 8
for auxiliary contacts	20 14
Safety related data	

Safety related data

	_
product function mirror contact acc. to IEC 60947-4-1	Yes
B10 value with high demand rate acc. to SN 31920	450 000
proportion of dangerous failures	
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	40 %
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	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
Contification/ approvals	

Certificates/ approvals

#### **General Product Approval**















Functional
Safety/Safety of
Machinery

#### **Declaration of Conformity**

**Test Certificates** 

Marine / Shipping

Type Examination
Certificate

UK Declaration of Conformity



Special Test Certificate

Type Test Certificates/Test Report



#### Marine / Shipping







LRS







Confirmation

### other



Confirmation

## 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=3RT2023-1AB00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2023-1AB00

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2023-1AB00

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

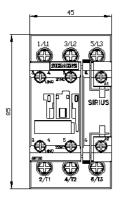
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2023-1AB00&lang=en

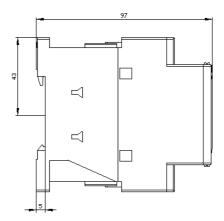
Characteristic: Tripping characteristics, I²t, Let-through current

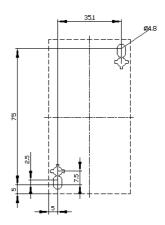
https://support.industry.siemens.com/cs/ww/en/ps/3RT2023-1AB00/char

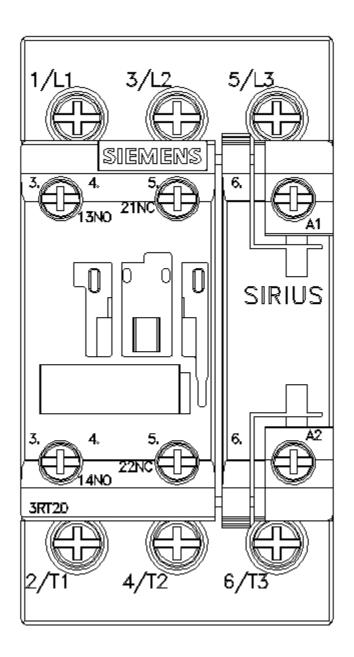
Further characteristics (e.g. electrical endurance, switching frequency)

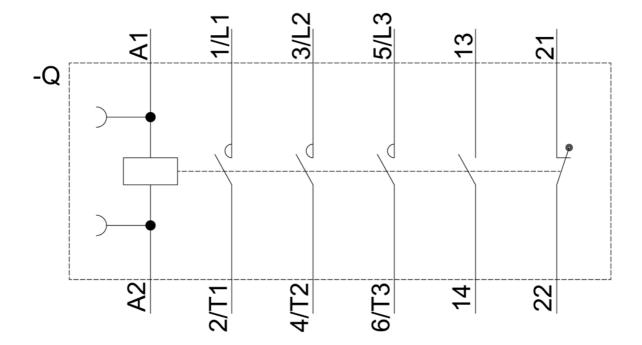
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2023-1AB00&objecttype=14&gridview=view1











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