SIEMENS

Data sheet

3RT2024-2AF00



power contactor, AC-3 12 A, 5.5 kW / 400 V 1 NO + 1 NC, 110 V AC, 50 Hz 3-pole, Size S0 Spring-type terminal

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	SO
product extension	
 function module for communication 	No
auxiliary switch	Yes
power loss [W] for rated value of the current	
 at AC in hot operating state 	0.9 W
 at AC in hot operating state per pole 	0.3 W
without load current share typical	7.6 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 betweencoil and main contacts according 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
 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	
 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 	40 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	40 A
— up to 690 V at ambient temperature 60 °C rated value	35 A
• at AC-3	
— at 400 V rated value	12 A
— at 500 V rated value	12 A
— at 690 V rated value	9 A
● at AC-3e	
— at 400 V rated value	12 A
— at 500 V rated value	12 A
— at 690 V rated value	9 A
 at AC-4 at 400 V rated value 	12.5 A
 at AC-5a up to 690 V rated value 	35.2 A
 at AC-5b up to 400 V rated value 	9.9 A
• at AC-6a	
 — up to 230 V for current peak value n=20 rated value 	11.4 A
 up to 400 V for current peak value n=20 rated value 	11.4 A
— up to 500 V for current peak value n=20 rated value	11.3 A
 — up to 690 V for current peak value n=20 rated value at AC-6a 	9 A
 at AC-ba — up to 230 V for current peak value n=30 rated value 	7.6 A
 — up to 400 V for current peak value n=30 rated value 	7.6 A
 up to 500 V for current peak value n=30 rated value 	7.6 A
— up to 690 V for current peak value n=30 rated value	7.6 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating	10 mm ²
cycles at AC-4	
at 400 V rated value	5.5 A
• at 690 V rated value	5.5 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	1A
— 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 	

— 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			
 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			
 with 2 current paths in series at DC-3 at DC-5 				
— 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			
 with 3 current paths in series at DC-3 at DC-5 				
— 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	3 kW			
— at 400 V rated value	5.5 kW			
— at 500 V rated value	5.5 kW			
— at 690 V rated value	7.5 kW			
• at AC-3e				
— at 230 V rated value	3 kW			
— at 400 V rated value	5.5 kW			
— at 500 V rated value	5.5 kW			
— at 690 V rated value	7.5 kW			
operating power for approx. 200000 operating cycles at AC-4				
• at 400 V rated value	2.6 kW			
• at 690 V rated value	4.6 kW			
operating apparent power at AC-6a				
• up to 230 V for current peak value n=20 rated value	4.5 kVA			
 up to 400 V for current peak value n=20 rated value 	7.8 kVA			
• up to 500 V for current peak value n=20 rated value	9.8 kVA			
• up to 690 V for current peak value n=20 rated value	10.7 kVA			
operating apparent power at AC-6a				
• up to 230 V for current peak value n=30 rated value	3 kVA			
• up to 400 V for current peak value n=30 rated value	5.2 kVA			
• up to 500 V for current peak value n=30 rated value	6.5 kVA			
• up to 690 V for current peak value n=30 rated value	9 kVA			
short-time withstand current in cold operating state up to 40 °C				
 limited to 1 s switching at zero current maximum 	210 A; Use minimum cross-section acc. to AC-1 rated value			
 limited to 5 s switching at zero current maximum 	210 A; Use minimum cross-section acc. to AC-1 rated value			
 limited to 10 s switching at zero current maximum 	162 A; Use minimum cross-section acc. to AC-1 rated value			
 limited to 30 s switching at zero current maximum 	103 A; Use minimum cross-section acc. to AC-1 rated value			
 limited to 60 s switching at zero current maximum 	88 A; Use minimum cross-section acc. to AC-1 rated value			
no-load switching frequency				
• at AC	5 000 1/h			
operating frequency				
• at AC-1 maximum	1 000 1/h			
• at AC-2 maximum	1 000 1/h			
• at AC-3 maximum	1 000 1/h			

• at AC 30 maximum	1 000 1/b
• at AC-3e 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	110 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 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.82
apparent holding power of magnet coil at AC	
• at 50 Hz	7.6 VA
inductive power factor with the holding power of the	
coil	
● at 50 Hz	0.25
closing delay	
• at AC	8 40 ms
opening delay	
• at AC	4 16 ms
arcing time	10 10 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous contact	1
number of NO contacts for auxiliary contacts instantaneous contact	1
operational current at AC-12 maximum	10 A
operational current at AC-15	
• at 230 V rated value	10 A
 at 400 V rated value 	3 A
• at 500 V rated value	2 A
• at 690 V rated value	1 A
operational current at DC-12	
at 24 V rated value	10 A
• at 48 V rated value	6 A
at 60 V rated value	6 A
at 110 V rated value	3 A
at 125 V rated value	2 A
at 220 V rated value	1 A
at 600 V rated value	0.15 A
operational current at DC-13	
• at 24 V rated value	10 A
• at 48 V rated value	2 A
• at 60 V rated value	2 A
at 110 V rated value	1 A
at 125 V rated value	0.9 A
at 220 V rated value	0.3 A
at 600 V rated value	0.1 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	11 A
at 480 V rated value	11 A
at 600 V rated value	11 A
yielded mechanical performance [hp]	
 for single-phase AC motor at 110/120 V rated value 	1 hn
— at 230 V rated value	1 hp 2 hp
 at 230 v rated value for 3-phase AC motor 	
• IUI J-PHASE AU HIULUI	

	at 200/200 M rated value			
- at 490480 V field value 7.5 fip 10 kp	— at 200/208 V rated value	3 hp		
contact rating of auxiliary contacts according to UL A000 / P000 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 - with type of coordination 1 required - with type of coordination 1 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required mounting position #1/1807 industing of manaicos mounting position #1/1807 industing of manaicos width • adde-by-side mounting • adde-by-side mounting • adde-by-side mounting • adde-by-side mounting • with side by-side mounting • adde-by-side mounting </td <td></td> <td>A600 / P600</td>		A600 / P600		
for short-circuit protection of the main circuit —with type of coordination 1 required _with type of assignment 2 required G: 53A (690V, 100AA), abl: 32A (690V, 100AA), BS8B: 63A (415V, 80KA) G: 55A (690V, 100AA), abl: 32A (690V, 100AA), BS8B: 63A (415V, 80KA) G: 55A (690V, 100AA), abl: 32A (690V, 100AA), BS8B: 25A (415V, 80KA) G: 55A (690V, 100AA), abl: 32A (690V, 100AA), BS8B: 25A (415V, 80KA) G: 55A (690V, 100AA), abl: 32A (690V, 100AA), BS8B: 25A (415V, 80KA) G: 55A (690V, 100AA), abl: 32A (690V, 100AA), BS8B: 25A (415V, 80KA) G: 55A (690V, 100AA), abl: 32A (690V, 100AA), BS8B: 25A (415V, 80KA) G: 55A (690V, 100AA), abl: 32A (690V, 100AA), BS8B: 25A (415V, 80KA) G: 55A (690V, 100AA), abl: 32A (690V, 100AA), BS8B: 25A (415V, 80KA) G: 55A (690V, 100AA), abl: 32A (690V, 100AA), BS8B: 25A (415V, 80KA) G: 55A (690V, 100AA), abl: 32A (690V, 100AA), BS8B: 25A (415V, 80KA) G: 55A (690V, 100AA), abl: 32A (690V, 100AA), BS8B: 25A (415V, 80KA) G: 55A (690V, 100AA), abl: 32A (690V, 100AA), BS8B: 25A (415V, 80KA) G: 55A (690V, 100AA), abl: 32A (690V, 100AA), BS8B: 25A (415V, 80KA) G: 55A (690V, 100AA), abl: 32A (690V, 100AA), BS8B: 25A (415V, 80KA) G: 55A (690V, 100AA), abl: 32A (690V, 100AA), BS8B: 25A (415V, 80KA) G: 55A (690V, 100AA), abl: 32A (690V, 100AA), BS8B: 25A (415V, 80KA) G: 55A (690V, 100AA), abl: 32A (690V, 100AA), BS8B: 25A (415V, 80KA) G: 55A (690V, 100AA), abl: 32A (690V, 100AA), abl: 32A (690V, 100AA), abl: 32A (690V, 100A), a				
with type of assignment 2 requiredgC: 63A (680V, 100KA), BS3E: 63A (45V, 80KA)• for short-drout protection of the auxility switch requiredgC: 25A (680V, 100KA), BS3E: 63A (45V, 80KA)firstalizion/mounting/idmensions*/180° rotation possible on vertical mounting surface, can be tilted toward and backward by +1-22.8° on vertical mounting surface, can be tilted according to DIN EN 60715firstalizion/mounting/idmensions*/180° rotation possible on vertical mounting surface, can be tilted 				
- with type of assignment 2 required of short-clocal protocition of the auxiliary switch required instaliation/ mounting/ dimensions mounting possible on vertical mounting surface; can be tilted forward and backward by t+2.2.5" on vertical mounting surface; fastening method science was disago-announting out 35 mm standard mounting rail according to DIN EN 60715 Yes height is die-by-side mounting - forwards - downwards - downwards				
• for short-circuit protection of the auxiliary switch required gC: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by ++-22.9° on vertical mounting surface; as did-by-side mounting • side-by-side mounting Yes • side-by-side mounting Yes • width 45 mm • dopth 97 mm required spacing 100 mm • upwards 10 mm - downwards 10 mm - ownwards 10 mm - ordarde		• · · · · · · · · · · · · · · · · · · ·		
required Installation/ mounting cosition Installation/ mounting cosition +/-180* rotation possible on vertical mounting surface: can be tilted forward and backward by ++2.25* on vertical mounting surface: fastening method screw and snap-on mounting on 35 mm standard mounting relia according to DN EN 60715 height 102 mm width 45 mm depth 97 mm required spacing • • with side-by-side mounting - - forwards 10 mm - downwards 10 mm - for axillary and control circuit spring-loaded terminals for axillary and control cir				
Installation/ mounting/ dimensions 4/-180* rotation possible on vertical mounting surface, can be tilted forward and backward by ++ 22.5* on vertical mounting surface, can be tilted forward and backward by ++ 22.5* on vertical mounting surface, can be tilted forward and backward by ++ 22.5* on vertical mounting surface, can be tilted forward and backward by ++ 22.5* on vertical mounting surface, can be tilted forward and backward by ++ 22.5* on vertical mounting surface, can be tilted forward by the 25.5* on vertical mounting surface, can be tilted forward by the 25.5* on vertical mounting surface, can be tilted forward by the 22.5* on vertical mounting surface, can be tilted forward by the 25.5* on vertical mounting surface, can be tilted forward by the 25.5* on vertical mounting surface, can be tilted forward by the 25.5* on vertical mounting surface, can be tilted forward by the 25.5* on vertical mounting surface, can be tilted forward by the 25.5* on vertical mounting surface, can be tilted forward by the 25.5* on vertical mounting surface, can be tilted forward by the 25.5* on vertical mounting surface, can be tilted forward by the 25.5* on vertical mounting surface, can be tilted forward by the 25.5* on vertical mounting surface, can be tilted form. - forwards 10 mm - upwards 10 mm - onwards 10 mm - o		gG: 10 A (500 V, 1 KA)		
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depth 97 mm required spacing 97 mm • with side-by-side mounting 10 mm - gowards 10 mm - upwards 10 mm - at the side 0 mm • for grounded parts 10 mm - upwards 10 mm - upwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 10 mm - downwards 10 mm - at the side 6 mm - downwards 10 mm - sole 6 mm Connections/Terminals spring-loaded terminals type of electrical connection 6 mm • for auxiliary and control circuit spring-loaded terminals • for main contacts Spring-type terminals • of majo contacts Spring-type terminals	height	102 mm		
required spacing • with side-by-side mounting forwards 10 mm upwards 10 mm downwards 0 mm downwards 0 mm downwards 10 mm downwards 10 mm downwards 10 mm growards 10 mm growares Spring-loaded terminals </td <td>width</td> <td>45 mm</td>	width	45 mm		
• with side-by-side mounting - forwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 0 mm - at the side 0 mm - for organds 10 mm - at the side 0 mm - forwards 10 mm - upwards 10 mm - downwards 10 mm - upwards 10 mm - upwards 10 mm - upwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 10 mm - upwards 10 mm - domards 10 mm - downwards 10 mm - solid creatic connection spring-loaded terminals • for main current circuit spring-loaded terminals • of rangingt coil 2x (1 10 mm ²) • of magingt coil 2x (1 10 mm ²)	depth	97 mm		
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• for grounded parts 10 mm - forwards 10 mm - upwards 10 mm - at the side 6 mm - downwards 10 mm • for live parts - forwards - forwards 10 mm - upwards 10 mm - downwards 10 mm - at the side 6 mm Connection/forminals 5 ming-loaded terminals type of electrical connection spring-loaded terminals • of magnet coil Spring-type terminals type of connectable conductor cross-sections Spring-type terminals • of magnet coil 2x (1 10 mm ²) - solid or stranded 2x (1 10 mm ²) - solid or stranded with core end processing 2x (1 6 mm ²) • at AWG cables for main contacts 2x (8 8) connectab	— downwards	10 mm		
- forwards 10 mm - upwards 6 mm - at the side 6 mm - downwards 10 mm - forwards 10 mm - upwards 10 mm - forwards 10 mm - upwards 10 mm - forwards 10 mm - upwards 10 mm - downwards 10 mm - at the side 6 mm for main current circuit spring-loaded terminals of magnet coil Spring-lype terminals type of connectable conductor cross-sections 6 ma ² of main contacts 2x (1 10 mm ²) - solid or stranded 2x (1 6 mm ²) - finely stranded with co	— at the side	0 mm		
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 for live parts forwards forwards upwards downwards for mm downwards for mm at the side for main current circuit spring-loaded terminals of rauxiliary and control circuit spring-loaded terminals of magnet coil Spring-type terminals type of connectable conductor cross-sections of magnet coil Spring-type terminals of main contacts solid 2x (1 10 mm³) solid or stranded 2x (1 6 mm²) at AWG cables for main contacts solid stranded without core end processing 2x (1 6 mm²) stranded with core end processing 2x (1 6 mm²) stranded stranded melly stranded with core end processing stranded stranded stranded melly stranded with core end processing stranded stranded stranded melly stranded with core end processing finely stranded with core end processing melly stranded with core end processing mely stranded with core end pr	— at the side	6 mm		
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- upwards 10 mm - downwards 10 mm - at the side 6 mm Connections/Terminals type of electrical connection • for main current circuit spring-loaded terminals • for auxiliary and control circuit spring-loaded terminals • at contactor for auxiliary contacts Spring-type terminals • of magnet coll Spring-type terminals type of connectable conductor cross-sections • for main contacts - solid 2x (1 10 mm²) - solid or stranded 2x (1 6 mm²) - finely stranded with core end processing 2x (1 6 mm²) • at AWG cables for main contacts 2x (1 6 mm²) • solid 1 10 mm² • stranded 1 10 mm² • finely stranded with core end processing 1 6 mm² • finely stranded with core end processing 1 6 mm² • finely stranded with core end processing 1 6 mm² • finely stranded with core end processing <td> for live parts </td> <td></td>	 for live parts 			
- downwards 10 mm - at the side 6 mm Connections/ Terminals type of electrical connection spring-loaded terminals • for main current circuit spring-loaded terminals • at contactor for auxiliary contacts Spring-loaded terminals • of magnet coil Spring-loaded terminals type of connectable conductor cross-sections 6 mm²) • for main contacts 2x (1 10 mm²) - solid 2x (1 10 mm²) - finely stranded with core end processing 2x (1 6 mm²) • at AWG cables for main contacts 2x (1 6 mm²) • at AWG cables for main contacts 2x (1 6 mm²) • solid 1 10 mm² • finely stranded with core end processing 1 6 mm² • solid 1 10 mm² • finely stranded with core end processing 1 6 mm² • finely stranded with core end processing 1 6 mm² • finely stranded with core end processing 1 6 mm² <td< td=""><td>— forwards</td><td>10 mm</td></td<>	— forwards	10 mm		
at the side 6 mm Connections/ Terminals type of electrical connection spring-loaded terminals • for main current circuit spring-loaded terminals • at contactor for auxiliary and control circuit spring-loaded terminals • at contactor for auxiliary contacts Spring-type terminals • of magnet coil Spring-type terminals type of connectable conductor cross-sections • for main contacts 2x (1 10 mm²) - solid or stranded 2x (1 10 mm²) - solid or stranded 2x (1 6 mm²) - finely stranded with core end processing 2x (1 6 mm²) • at AWG cables for main contacts 2x (1 6 mm²) • at AWG cables for main contacts 2x (1 10 mm² • solid 1 10 mm² • solid 1 10 mm² • finely stranded with core end processing 1 10 mm² • finely stranded with core end processing 1 6 mm² • finely stranded with core end processing 1 6 mm² • finely stranded with core end processing 1 6 mm² • finely stranded with core end processing 1 6 mm² • finely stranded with core en	— upwards	10 mm		
Connections/ Terminals type of electrical connection spring-loaded terminals • for main current circuit spring-loaded terminals • for auxiliary and control circuit spring-loaded terminals • at contactor for auxiliary contacts Spring-type terminals • of magnet coil Spring-type terminals type of connectable conductor cross-sections • for main contacts - solid 2x (1 10 mm²) - solid or stranded 2x (1 10 mm²) - finely stranded with core end processing 2x (1 6 mm²) - finely stranded with core end processing 2x (1 6 mm²) • at AVVG cables for main contacts 2x (1 6 mm²) • solid 1 10 mm² • solid 1 10 mm² • solid 1 10 mm² • stranded 1 6 mm² • finely stranded with core end processing 1 6 mm² • finely stranded without core end processing 1 6 mm² • finely stranded with core end processing 1 6 mm² • solid or stranded 0.5 2.5 mm² • solid or stranded 0.5 1.5 mm²	— downwards	10 mm		
type of electrical connection spring-loaded terminals • for main current circuit spring-loaded terminals • for auxiliary and control circuit spring-loaded terminals • at contactor for auxiliary contacts Spring-type terminals • of magnet coil Spring-type terminals type of connectable conductor cross-sections spring-type terminals • for main contacts 2x (1 10 mm²) — solid 2x (1 10 mm²) — solid or stranded 2x (1 10 mm²) — finely stranded with core end processing 2x (1 6 mm²) • at AWG cables for main contacts 2x (1 8 8) connectable conductor cross-section for main contacts 1 10 mm² • solid 1 10 mm² • stranded 1 10 mm² • finely stranded with core end processing 1 10 mm² • finely stranded with core end processing 1 10 mm² • solid 1 10 mm² • finely stranded with core end processing 1 6 mm² • finely stranded with core end processing 0.5 2.5 mm² • solid or stranded 0.5 2.5 mm² • solid or stranded 0.5 1.5 mm²	— at the side	6 mm		
• for main current circuit spring-loaded terminals • for auxiliary and control circuit spring-loaded terminals • at contactor for auxiliary contacts Spring-type terminals • of magnet coil Spring-type terminals type of connectable conductor cross-sections For main contacts • for main contacts 2x (1 10 mm²) - solid or stranded 2x (1 10 mm²) - finely stranded with core end processing 2x (1 6 mm²) - finely stranded without core end processing 2x (1 6 mm²) • at AWG cables for main contacts 2x (1 10 mm²) • solid 1 10 mm² • at AWG cables for main contacts 2x (1 6 mm²) • solid 1 10 mm² • stranded 1 6 mm² • finely stranded with core end processing 1 6 mm² • finely stranded with core end processing 1 6 mm² • finely stranded with core end processing 1 6 mm² • finely stranded with core end processing 1 6 mm²	Connections/ Terminals			
• for auxiliary and control circuit spring-loaded terminals • at contactor for auxiliary contacts Spring-type terminals • of magnet coil Spring-type terminals type of connectable conductor cross-sections • • for main contacts - - solid 2x (1 10 mm²) - solid or stranded 2x (1 10 mm²) - finely stranded with core end processing 2x (1 6 mm²) - finely stranded without core end processing 2x (1 6 mm²) • at AWG cables for main contacts 2x (1 6 mm²) • at AWG cables for main contacts 2x (1 6 mm²) • solid 1 10 mm² • stranded 1 10 mm² • finely stranded with core end processing 1 6 mm² • finely stranded without core end processing 1 6 mm² • finely stranded with core end processing 1 6 mm² • finely stranded without core end processing 1 6 mm² • finely stranded without core end processing 1 6 mm² • solid or stranded 0.5 2.5 mm²	type of electrical connection			
• at contactor for auxiliary contacts Spring-type terminals • of magnet coil Spring-type terminals type of connectable conductor cross-sections for main contacts - solid - solid or stranded - finely stranded with core end processing - finely stranded without core end processing - at AWG cables for main contacts - solid - solid - solid - finely stranded with core end processing - at AWG cables for main contacts - solid - solid - solid - at AWG cables for main contacts - solid - solid 	 for main current circuit 	spring-loaded terminals		
• of magnet coil Spring-type terminals type of connectable conductor cross-sections • for main contacts - solid 2x (1 10 mm²) - solid or stranded 2x (1 10 mm²) - finely stranded with core end processing 2x (1 6 mm²) - finely stranded without core end processing 2x (1 6 mm²) - finely stranded without core end processing 2x (1 6 mm²) - finely stranded without core end processing 2x (1 6 mm²) - solid 1 10 mm² • at AWG cables for main contacts 2x (1 8 8) connectable conductor cross-section for main contacts 1 10 mm² • solid 1 10 mm² • stranded 1 10 mm² • finely stranded with core end processing 1 6 mm² • finely stranded with core end processing 1 6 mm² • finely stranded with core end processing 1 6 mm² • solid or stranded 0.5 2.5 mm² • solid or stranded 0.5 2.5 mm² • finely stranded with core end processing 0.5 1.5 mm²	 for auxiliary and control circuit 	spring-loaded terminals		
• of magnet coil Spring-type terminals type of connectable conductor cross-sections • for main contacts - solid 2x (1 10 mm²) - solid or stranded 2x (1 10 mm²) - finely stranded with core end processing 2x (1 6 mm²) - finely stranded without core end processing 2x (1 6 mm²) - finely stranded without core end processing 2x (1 6 mm²) - finely stranded without core end processing 2x (1 6 mm²) - solid 1 10 mm² • at AWG cables for main contacts 2x (1 8 8) connectable conductor cross-section for main contacts 1 10 mm² • solid 1 10 mm² • stranded 1 10 mm² • finely stranded with core end processing 1 6 mm² • finely stranded with core end processing 1 6 mm² • finely stranded with core end processing 1 6 mm² • solid or stranded 0.5 2.5 mm² • solid or stranded 0.5 2.5 mm² • finely stranded with core end processing 0.5 1.5 mm²	 at contactor for auxiliary contacts 	Spring-type terminals		
type of connectable conductor cross-sections • for main contacts - solid 2x (1 10 mm²) - solid or stranded 2x (1 10 mm²) - finely stranded with core end processing 2x (1 6 mm²) - finely stranded without core end processing 2x (1 6 mm²) - finely stranded without core end processing 2x (1 6 mm²) • at AWG cables for main contacts 2x (1 8 8) connectable conductor cross-section for main contacts 2x (1 8 8) • solid 1 10 mm² • stranded 1 10 mm² • finely stranded with core end processing 1 6 mm² • finely stranded with core end processing 1 6 mm² • finely stranded with core end processing 1 6 mm² • finely stranded with core end processing 1 6 mm² • finely stranded with core end processing 1 6 mm² • solid or stranded 0.5 2.5 mm² • solid or stranded 0.5 1.5 mm²	-			
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finely stranded with core end processing $2x (1 6 mm^2)$ finely stranded without core end processing $2x (1 6 mm^2)$ • at AWG cables for main contacts $2x (18 8)$ connectable conductor cross-section for main contacts $1 10 mm^2$ • solid $1 10 mm^2$ • stranded $1 0 mm^2$ • finely stranded with core end processing $1 6 mm^2$ • finely stranded with core end processing $1 6 mm^2$ • finely stranded without core end processing $1 6 mm^2$ • finely stranded without core end processing $1 6 mm^2$ • finely stranded with core end processing $0.5 2.5 mm^2$ • solid or stranded $0.5 1.5 mm^2$	— solid or stranded			
finely stranded without core end processing • at AWG cables for main contacts2x (1 6 mm²) 2x (18 8)connectable conductor cross-section for main contacts1 10 mm²• solid1 10 mm²• stranded1 10 mm²• finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing1 6 mm²connectable conductor cross-section for auxiliary contacts0.5 2.5 mm²• solid or stranded0.5 1.5 mm²	— finely stranded with core end processing			
• at AWG cables for main contacts 2x (18 8) connectable conductor cross-section for main contacts 1 10 mm² • solid 1 10 mm² • stranded 1 10 mm² • finely stranded with core end processing 1 6 mm² • finely stranded without core end processing 1 6 mm² • finely stranded without core end processing 1 6 mm² • finely stranded without core end processing 1 6 mm² • solid or stranded 0.5 2.5 mm² • finely stranded with core end processing 0.5 1.5 mm²				
connectable conductor cross-section for main contacts 1 10 mm² • solid 1 10 mm² • stranded 1 10 mm² • finely stranded with core end processing 1 6 mm² • finely stranded without core end processing 1 6 mm² • finely stranded without core end processing 1 6 mm² • finely stranded without core end processing 1 6 mm² • finely stranded without core end processing 0.5 2.5 mm² • solid or stranded 0.5 2.5 mm² • finely stranded with core end processing 0.5 1.5 mm²				
• solid 1 10 mm² • stranded 1 10 mm² • finely stranded with core end processing 1 6 mm² • finely stranded without core end processing 1 6 mm² • finely stranded without core end processing 1 6 mm² • finely stranded without core end processing 0.5 2.5 mm² • solid or stranded 0.5 2.5 mm² • finely stranded with core end processing 0.5 1.5 mm²	connectable conductor cross-section for main			
 stranded finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing formectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing 0.5 2.5 mm² 0.5 1.5 mm² 	contacts			
 finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing 6 mm² 7 mm² 0.5 2.5 mm² 0.5 1.5 mm² 	• solid	1 10 mm²		
• finely stranded without core end processing 1 6 mm² connectable conductor cross-section for auxiliary contacts • solid or stranded • solid or stranded 0.5 2.5 mm² • finely stranded with core end processing 0.5 1.5 mm²				
connectable conductor cross-section for auxiliary contacts • solid or stranded 0.5 2.5 mm² • finely stranded with core end processing 0.5 1.5 mm²	 finely stranded with core end processing 			
• solid or stranded 0.5 2.5 mm² • finely stranded with core end processing 0.5 1.5 mm²	 finely stranded without core end processing 	1 6 mm²		
• finely stranded with core end processing 0.5 1.5 mm ²				
	 solid or stranded 	0.5 2.5 mm ²		
• finely stranded without core end processing 0.5 2.5 mm ²	 finely stranded with core end processing 	0.5 1.5 mm²		
	 finely stranded without core end processing 	0.5 2.5 mm ²		

type of connectable	conductor cross-sect	ions				
 for auxiliary contract 	ntacts					
— solid or st	randed		2x (0.5 2.5 mm²)			
— finely stra	nded with core end proc	essing	2x (0.5 1.5 mm²)	mm²)		
— finely stra	nded without core end p	rocessing	2x (0.5 2.5 mm²)			
 at AWG cables 	for auxiliary contacts		2x (20 14)			
AWG number as co section	ded connectable cond	uctor cross				
 for main contact 	cts		18 8			
 for auxiliary col 	ntacts		20 14			
Safety related data						
product function						
-	according to IEC 60947	-4-1	Yes			
B10 value with high o	demand rate according t	o SN 31920	450 000			
proportion of dange						
 with low deman 	nd rate according to SN	31920	40 %			
	and rate according to SN		73 %			
	low demand rate accord		100 FIT			
31920		0				
T1 value for proof tes IEC 61508	st interval or service life	according to	20 у			
protection class IP 60529	on the front according	to IEC	IP20			
touch protection on	the front according to	IEC 60529	finger-safe, for vertical conta	act from the front		
suitability for use						
 safety-related s 	switching OFF		Yes			
Certificates/ approva	ls					
(CA)		<u>Confirmatic</u>		KC	EHC	
EMC	Functional Safety/Safety of Machinery	Declaration of	of Conformity	Test Certificates		
RCM	<u>Type Examination</u> <u>Certificate</u>	UK CA	CE EG-Konf.	Special Test Certific- ate	Type Test Certific- ates/Test Report	
Marine / Shipping						
	AL SA	۴Å	Houde		(ALLAN	
ABS	BUREAU VERITAS		LRS	PRS	RINA	
Marine / Shipping	other					
KMRS	<u>Confirmation</u>	DE	<u>Confirmation</u>			
Further information						

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

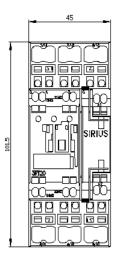
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2024-2AF00&lang=en

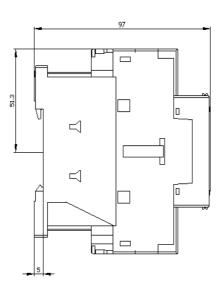
Characteristic: Tripping characteristics, I2t, Let-through current

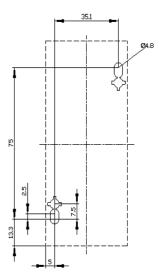
https://support.industry.siemens.com/cs/ww/en/ps/3RT2024-2AF00/char

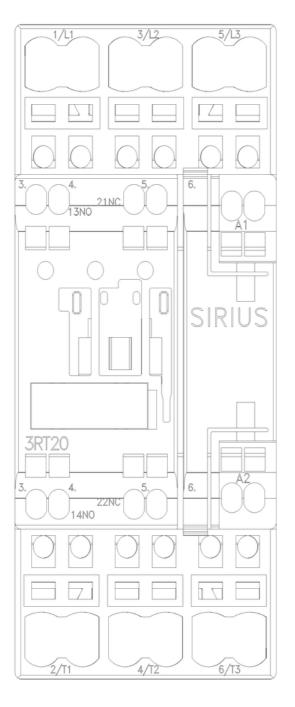
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2024-2AF00&objecttype=14&gridview=view1









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