SIEMENS

Data sheet 3RT2027-1AB00



Power contactor, AC-3 32 A, 15 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	
 function module for communication 	No
auxiliary switch	Yes
power loss [W] for rated value of the current at AC in hot operating state	8.1 W
• per pole	2.7 W
power loss [W] for rated value of the current without load current share typical	9.8 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	8,3g / 5 ms, 5,3g / 10 ms
shock resistance with sine pulse	
• at AC	13,5g / 5 ms, 8,3g / 10 ms
mechanical service life (switching cycles)	
of contactor typical	10 000 000
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000
of the contactor with added auxiliary switch block typical	10 000 000
reference code acc. to IEC 81346-2	Q
Substance Prohibitance (Date)	01.10.2009
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 acc. 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	
operational current		
 at AC-1 at 400 V at ambient temperature 40 °C rated value 	50 A	
• at AC-1		
 up to 690 V at ambient temperature 40 °C rated value 	50 A	
— up to 690 V at ambient temperature 60 $^{\circ}\text{C}$ rated value	42 A	
• at AC-3		
— at 400 V rated value	32 A	
— at 500 V rated value	32 A	
— at 690 V rated value	21 A	
 at AC-4 at 400 V rated value 	22 A	
 at AC-5a up to 690 V rated value 	44 A	
 at AC-5b up to 400 V rated value 	26.5 A	
• at AC-6a		
 up to 230 V for current peak value n=20 rated value 	30.8 A	
 up to 400 V for current peak value n=20 rated value 	30.8 A	
— up to 500 V for current peak value n=20 rated value	27 A	
up to 690 V for current peak value n=20 rated valueat AC-6a	21 A	
 up to 230 V for current peak value n=30 rated value 	20.5 A	
 up to 400 V for current peak value n=30 rated value 	20.5 A	
 up to 500 V for current peak value n=30 rated value 	18 A	
up to 690 V for current peak value n=30 rated value	18 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		
 at 400 V rated value 	12 A	
 at 690 V rated value 	12 A	
operating power • at AC-3		
— at 230 V rated value	7.5 kW	
— at 400 V rated value	15 kW	
— at 500 V rated value	15 kW	
— at 690 V rated value	18.5 kW	
operating power for approx. 200000 operating cycles at AC-4		
• at 400 V rated value	6 kW	
at 690 V rated value	10.3 kW	
operating apparent power at AC-6a		
• up to 230 V for current peak value n=20 rated value	12.2 kV·A	
• up to 400 V for current peak value n=20 rated value	21.3 kV·A	
• up to 500 V for current peak value n=20 rated value	23.3 kV·A	
• up to 690 V for current peak value n=20 rated value	25 kV·A	
operating apparent power at AC-6a		
• up to 230 V for current peak value n=30 rated value	8.1 kV·A	
• up to 400 V for current peak value n=30 rated value	14.2 kV·A	
• up to 500 V for current peak value n=30 rated value	15.5 kV·A	
• up to 690 V for current peak value n=30 rated value	21.5 kV·A	
short-time withstand current in cold operating state up to 40 °C		
 limited to 1 s switching at zero current maximum 	499 A; Use minimum cross-section acc. to AC-1 rated value	
 limited to 5 s switching at zero current maximum 	395 A; Use minimum cross-section acc. to AC-1 rated value	

 limited to 10 s switching at zero current maximum 	260 A; Use minimum cross-section acc. to AC-1 rated value		
 limited to 30 s switching at zero current maximum 	186 A; Use minimum cross-section acc. to AC-1 rated value		
 limited to 60 s switching at zero current maximum 	152 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	750 1/h		
• at AC-3 maximum	750 1/h		
at AC-4 maximum	250 1/h		
Control circuit/ Control	200 IIII		
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	77 V·A		
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	9.8 V·A		
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 enerating mechanism	Standard A1 A2		
control version of the switch operating mechanism	Standard A1 - A2		
Auxiliary circuit			
Auxiliary circuit number of NC contacts for auxiliary contacts	Standard A1 - A2		
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact	1		
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts			
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact	1		
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum	1		
Auxiliary circuit number of NC 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-15	1 1 10 A		
Auxiliary circuit number of NC 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-15 • at 230 V rated value	1 1 10 A 10 A		
Auxiliary circuit number of NC 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-15 • at 230 V rated value • at 400 V rated value	1 1 10 A 10 A 3 A		
number of NC 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-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value	1 1 10 A 10 A 3 A 2 A		
number of NC 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-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value	1 1 10 A 10 A 3 A		
number of NC 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-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12	1 1 10 A 10 A 3 A 2 A 1 A		
number of NC 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-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value	1 1 10 A 10 A 3 A 2 A 1 A		
number of NC 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-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12	1 1 10 A 10 A 3 A 2 A 1 A 10 A		
number of NC 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-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value	1 1 10 A 10 A 3 A 2 A 1 A		
number of NC 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-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value	1 1 10 A 10 A 3 A 2 A 1 A 10 A		
number of NC 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-15	1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A		
number of NC 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-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 60 V rated value • at 110 V rated value	1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A		
number of NC 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-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 60 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value	1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A		
number of NC 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-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value	1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A		
number of NC 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-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value	1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A		
number of NC 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-15	1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A		
number of NC 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-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 220 V rated value • at 600 V rated value • at 220 V rated value • at 600 V rated value	1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A		
number of NC 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-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 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 24 V rated value • at 24 V rated value • at 25 V rated value • at 26 V rated value • at 27 V rated value • at 28 V rated value • at 600 V rated value	1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 2 A 1 A 0.15 A		
number of NC 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-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 24 V rated value • at 24 V rated value • at 25 V rated value • at 27 V rated value • at 28 V rated value • at 29 V rated value • at 600 V rated value • at 48 V rated value	1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A		
number of NC 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-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 600 V rated value • at 125 V rated value • at 600 V rated value • at 125 V rated value	1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 2 A 1 A 0.9 A		
number of NC 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-15 at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value operational current at DC-12 at 24 V rated value at 48 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 125 V rated value	1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 2 A 1 A 0.9 A 0.3 A		
number of NC 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-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 125 V rated value • at 125 V rated value • at 220 V rated value • at 24 V rated value • at 25 V rated value • at 27 V rated value • at 28 V rated value • at 29 V rated value • at 29 V rated value • at 29 V rated value • at 20 V rated value • at 30 V rated value	1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 2 A 1 A 0.9 A 0.3 A 0.1 A		
number of NC 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-15 at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value operational current at DC-12 at 24 V rated value at 48 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 125 V rated value	1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 2 A 1 A 0.9 A 0.3 A		

full-load current (FLA) for 3-phase AC motor				
## 1600 V roted value 27 A				
yielded mechanical performance (hp) • for single-phase AC motor — at 110/120 Y talex value — at 230 V rated value — at 200,008 V rated value — at 575000 V rated value — a				
For single-phase AC motor		27 A		
all 101/120 V rated value				
at 230 V rated value • for 3-phase AC motor at 200/208 V rated value at 200/208 V rated value at 420/480 V rated value at 420/480 V rated value at 420/480 V rated value at 575/600 V rated value with type of controlate according to U. with type of coordination 1 required with type of assignment 2 required at healthour mounting idimensions				
		·		
		5 hp		
	 for 3-phase AC motor 			
		·		
- at 575/600 V rated value		10 hp		
Contact rating of auxiliary contacts according to U.	— at 460/480 V rated value	·		
Short-circuit protection		25 hp		
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 — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required — with type of assignment 2 required — solid — solid or stranded — of major contacts — finely stranded with core end processing • at AWG cables for main contacts — at WG cables for main contacts — at AWG cables for main contacts — at AWG cables for main contacts — connectable conductor cross-section for main		A600 / P600		
• for short-circuit protection of the main circuit — with type of assignment 2 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 — for short-circuit protection of the auxiliary switch required — side-by-side mounting dimensions — side-by-side mounting — with side-by-side mounting — with side-by-side mounting — forwards — upwards — downwards — at the side — downwards — at the side — downwards — at the side — downwards — of rowards — of rowards — of rowards — ownwards — ownw	Short-circuit protection			
- 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 - for stallator mounting dimensions - for stallator mounting dimensions - fastening method - side-by-side mounting - side-by-side mounting - forwards - upwards - downwards - downwards - downwards - for main current circuit - for grounded parts - forwards - for live parts - forwards - for live parts - forwards - for live parts - forwards - downwards - for main current circuit - for auxiliary and control circuit - side connectable conductor cross-sections - for main current circuit - solid - solid or stranded - solid or stranded - finely stranded with core end processing - at AWG cables for main contacts - connectable conductor cross-section for main - connectable conductor cross-section for main	design of the fuse link			
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 mounting position *180° rotation possible on vertical mounting surface; can be tilted forward and backward by *12.5° on vertical mounting surface according to DIN EN 60715 • side-by-side mounting • side-by-side mounting • with side-by-side mounting • with side-by-side mounting • with side-by-side mounting • with side-by-side mounting • of or wards • of or grounded parts • for grounded parts • for grounded parts • for wards • for included the parts • for forwards • for five parts • for forwards • for five parts • for five parts • for wards • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil • solid or stranded • solid or stranded • solid or stranded • solid or stranded • finely stranded with core end processing • at AWG cables for main contacts connectable conductor cross-section for main • at AWG cables for main contacts connectable conductor cross-section for main • at AWG cables for main contacts connectable conductor cross-section for main • at AWG cables for main contacts connectable conductor cross-section for main • at AWG cables for main contacts connectable conductor cross-section for main	 for short-circuit protection of the main circuit 			
• for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method • side-by-side mounting • with side-by-side mounting • of mayreds — at the side — downwards — at the side — downwards — the side — downwards — to fire parts — forwards — to mm 5 type of connectations — for main current circuit — of maxiliary and control circuit — of main current circuit — o	— with type of coordination 1 required			
Installation/ mounting/ dimensions mounting position fastening method side-by-side mounting height width depth installation/ mounting with side-by-side mounting installation/ mounting installation/ mounting method screw and snap-on mounting noto 35 mm standard mounting surface screw and snap-on mounting noto 35 mm standard mounting rail according to DIN EN 60715 Yes height width depth installation/ mounting with side-by-side mounting with side-by-side mounting with side-by-side mounting installation/ mounting wiface; 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 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 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 and conting mand according to DIN EN 60715 **Side by **Side Mounting** **Ves **In **In **In **In **In **In **In **I	— with type of assignment 2 required			
mounting position mounting position fastening method side-by-side mounting side-by-side mounting side according to DIN EN 60715 yes side-by-side mounting sorted according to DIN EN 60715 yes side-by-side mounting surface sorte and backward by +/- 22.5° or vertical mounting surface screw-log in mounting onto 35 mm standard mounting surface screw-log in mounting surface screw-log in min standard mounting surface screw-log in standard mounting surface screw-log in min standard mounting surface screw-log in standard mounting succording to DIN EN 60715 screw-log in min standard mounting succording to DIN EN 60715 screw-log in min standard mounting succording to DIN EN 60715 screw-log in min standard mounting succording to DIN EN 60715 screw-log in min standard mounting succording to DIN EN 60715 screw-log in min standard mounting succording to DIN EN 60715 screw-log in min standard mounting according to DIN EN 60715 screw-log in min standard mounting succording to DIN EN 60715 screw-log in min standard mounting succording to DIN EN 60715 screw-log in min standard mounting succording to DIN EN 60715 screw-log in min standard mounting to DIN EN 60715 screw-log in min standard mounting to DIN EN 60715 screw-log in	,	gG: 10 A (500 V, 1 kA)		
mounting position +/-180" rotation possible on vertical mounting surface; can be filted forward and backward by +/- 22.5" on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes height ### 65 mm ### 45 mm ### 45 mm ### 45 mm ### 45 mm ### 45 mm ### 45 mm ### 45 mm ### 45 mm #	·			
fastening method screw and snap-on mounting onto 35 mm standard mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes height width				
according to DIN EN 60715 height 85 mm width 45 mm depth 97 mm required spacing • with side-by-side mounting — forwards 10 mm — downwards 10 mm — at the side 0 mm — for grounded parts — forwards 10 mm — at the side 6 mm — at the side 6 mm — at the side 6 mm — downwards 10 mm — at the side 6 mm — forwards 10 mm — at the side 6 mm — townwards 10 mm — at the side 6 mm — townwards 10 mm — at the side 6 mm — townwards 10 mm — at the side 6 mm — townwards 10 mm — townwards 10 mm — at the side 6 mm — townwards 10 mm — townw		forward and backward by +/- 22.5° on vertical mounting surface		
height width 45 mm depth 97 mm required spacing • with side-by-side mounting — forwards 10 mm — downwards 10 mm — at the side 0 mm • for grounded parts — forwards 10 mm — at the side 0 mm • for grounded parts 10 mm — downwards 10 mm — at the side 6 mm — downwards 10 mm — at the side 6 mm — downwards 10 mm • for live parts — forwards 10 mm • for live parts — forwards 10 mm • for live parts — downwards 10 mm Connections/ Terminals type of electrical connection • for main current circuit screw-type terminals • at contactor for auxiliary and control circuit screw-type terminals • of magnet coil screw-type terminals type of connectable conductor cross-sections • for main contacts — solid 2x (1 2.5 mm²), 2x (2.5 10 mm²) = at AWG cables for main contacts connectable conductor cross-section for main at AWG cables for main contacts connectable conductor cross-section for main	•	according to DIN EN 60715		
width depth 97 mm required spacing • with side-by-side mounting — forwards 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 — at the side 6 mm — downwards 10 mm — owards 10 mm • for live parts — forwards 10 mm • for live parts — forwards 10 mm — owards 10 mm • for live parts — forwards 10 mm — owards 10 mm				
depth required spacing with side-by-side mounting —forwards —upwards —downwards —at the side of or grounded parts —forwards —upwards —upwards —inforwards —upwards —forwards —upwards —forwards —upwards —at the side —downwards —forwards —forward				
required spacing with side-by-side mounting — forwards — upwards — downwards — at the side — for grounded parts — forwards — upwards — upwards — upwards — upwards — at the side — downwards — 10 mm — at the side — downwards — 10 mm — at the side — downwards — for live parts — for live parts — forwards — upwards — to mm — at the side — downwards — to mm — at the side — downwards — to mm Connections/ Terminals type of electrical connection • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main currant direct • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts connectable conductor cross-section for main				
with side-by-side mounting — forwards — upwards — downwards — at the side o mm of for grounded parts — forwards — upwards — upwards — forwards — upwards — upwards — upwards — at the side — downwards — at the side — downwards — for live parts — forwards — upwards — upwards — forwards — upwards — upwards — upwards — downwards — upwards — upwards — downwards — at the side Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts — at AWG cables for main contacts — connectable conductor cross-section for main	•	97 mm		
- forwards				
- upwards - downwards - at the side • for grounded parts - forwards - upwards - at the side - downwards - upwards - at the side - downwards - at the side - downwards - for live parts - forwards - upwards - for live parts - forwards - upwards - downwards - at the side - downwards - at the side - for wards - upwards - downwards - at the side - for main current circuit - for main current circuit - for main current circuit - for auxiliary and control circuit - for auxiliary and control circuit - for auxiliary and control circuit - so for main current circuit - so for main contacts - solid - solid - solid or stranded - finely stranded with core end processing - at AWG cables for main contacts - connectable conductor cross-section for main	, ,	40		
- downwards - at the side • for grounded parts - forwards - upwards - at the side - downwards - downwards - downwards - for live parts - forwards - upwards - downwards - upwards - downwards - downwards - downwards - at the side - downwards - downwards - for main current circuit - for auxiliary and control circuit - for auxiliary and control circuit - for auxiliary and control circuit - for main current oil - at contactor for auxiliary contacts - of magnet coil type of connectable conductor cross-sections - for main contacts - solid - solid or stranded - finely stranded with core end processing - at AWG cables for main contacts - at the side - the sid		10.11		
- at the side • for grounded parts - forwards - upwards - at the side - downwards - for live parts - forwards - upwards - for live parts - forwards - upwards - for live parts - forwards - upwards - downwards - downwards - at the side - for main current circuit - for auxiliary and control circuit - for auxiliary and control circuit - of magnet coil type of connectable conductor cross-sections - for main contacts - solid - solid or stranded - finely stranded with core end processing - at AWG cables for main contacts - connectable conductor cross-section for main - for main contacts - solid conductor cross-section for main - at AWG cables for main contacts - connectable conductor cross-section for main	·			
 for grounded parts forwards upwards at the side 6 mm downwards 10 mm for live parts for wards upwards upwards downwards at the side 6 mm Connections/ Terminals type of electrical connection for auxiliary and control circuit at contactor for auxiliary contacts of magnet coil screw-type terminals type of connectable conductor cross-sections for main contacts solid or stranded molid or stranded with core end processing at AWG cables for main contacts connectable conductor cross-section for main 				
- forwards 10 mm - upwards 6 mm - at the side 6 mm - downwards 10 mm • for live parts - forwards 10 mm - upwards 10 mm - to mm - forwards 10 mm - upwards 10 mm - upwards 10 mm - at the side 6 mm - upwards 10 mm - at the side 6 mm Connections/ Terminals type of electrical connection • for main current circuit screw-type terminals • for auxiliary and control circuit screw-type terminals • at contactor for auxiliary contacts Screw-type terminals • of magnet coil Screw-type terminals • of magnet coil Screw-type terminals • of magnet coil Screw-type terminals - solid Screw-type terminals type of connectable conductor cross-sections • for main contacts - solid 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		U mm		
- upwards - at the side - downwards 10 mm • for live parts - forwards 10 mm - upwards 10 mm - upwards 10 mm - upwards 10 mm - downwards 10 mm - at the side 6 mm Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts - solid - solid or stranded - finely stranded with core end processing • at AWG cables for main contacts connectable conductor cross-section for main at the side 6 mm screw-type terminals	9 1	40		
- at the side - downwards • for live parts - forwards - upwards - upwards - downwards - at the side - downwards - at the side - at the side - downwards - at the side - the side				
- downwards • for live parts - forwards - upwards - downwards - at the side Connections/ Terminals type of electrical connection • for main current circuit • of magnet coil type of connectable conductor cross-sections • for main contacts - solid - solid or stranded - finely stranded with core end processing • at AWG cables for main contacts - for live parts 10 mm 10 mm 5 or mm 5 crew-type terminals 6 crew-type	·			
for live parts — forwards — upwards — downwards — at the side Connections/ Terminals type of electrical connection • for main current circuit • at contactor for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts connectable conductor cross-section for main for live mm 10 mm 10 mm 2 crew-type terminals screw-type terminals Screw-type terminals Screw-type terminals Screw-type terminals 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (16 12), 2x (14 8)				
- forwards - upwards - downwards - at the side Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts - solid - solid or stranded - finely stranded with core end processing • at AWG cables for main contacts - connectable conductor cross-section for main		10 mm		
- upwards - downwards - at the side Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts - solid - solid or stranded - finely stranded with core end processing • at AWG cables for main contacts - downwards - for mm - for	·	40		
- downwards - at the side Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts - solid - solid or stranded - finely stranded with core end processing • at AWG cables for main contacts connectable conductor cross-section for main				
— at the side Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts - solid - solid or stranded - solid or stranded with core end processing • at AWG cables for main contacts connectable conductor cross-section for main 6 mm screw-type terminals Screw-type terminals Screw-type terminals 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (16 12), 2x (14 8)	•			
type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • for main contacts - solid - solid or stranded - finely stranded with core end processing • at AWG cables for main contacts connectable conductor cross-section for main connectable conductor cross-section for main				
type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts connectable conductor cross-section for main screw-type terminals Screw-type terminals Screw-type terminals 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²		6 mm		
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 at contactor for auxiliary contacts of magnet coil Screw-type terminals type of connectable conductor cross-sections for main contacts — solid — solid or stranded — finely stranded with core end processing of at AWG cables for main contacts 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (1 2.5 mm²), 2x (14 8) 		• •		
 ◆ of magnet coil Screw-type terminals type of connectable conductor cross-sections ◆ for main contacts — solid — solid or stranded — finely stranded with core end processing ◆ at AWG cables for main contacts 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (1 2.5 mm²), 2x (14 8) 				
type of connectable conductor cross-sections				
 for main contacts — solid — solid or stranded — finely stranded with core end processing ■ at AWG cables for main contacts 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (16 12), 2x (14 8) 		Screw-type terminals		
— 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				
 — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (16 12), 2x (14 8) 				
 — finely stranded with core end processing • at AWG cables for main contacts 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (16 12), 2x (14 8) 				
• at AWG cables for main contacts 2x (16 12), 2x (14 8) connectable conductor cross-section for main				
connectable conductor cross-section for main				
		2x (16 12), 2x (14 8)		

• 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 mm ²		
finely stranded with core end processing	0.5 2.5 mm²		
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 	16 8		
 for auxiliary contacts 	20 14		
Safety related data			
B10 value with high demand rate acc. to SN 31920	450 000		
proportion of dangerous failures			
 with low demand rate acc. to SN 31920 	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			
 safety-related switching OFF 	Yes		

Certificates/ approvals

General Product Approval





Confirmation



<u>KC</u>



EMC S	Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates
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Type Examination Certificate UK Declaration of Conformity



Type Test Certificates/Test Report

Special Test Certificate

Marine / Shipping













other

Confirmation



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=3RT2027-1AB00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2027-1AB00

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-1AB00

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

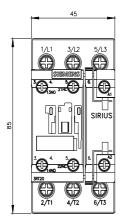
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2027-1AB00&lang=en

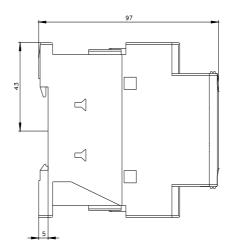
Characteristic: Tripping characteristics, I2t, Let-through current

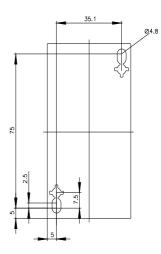
https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-1AB00/char

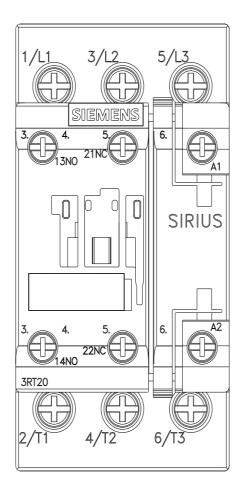
Further characteristics (e.g. electrical endurance, switching frequency)

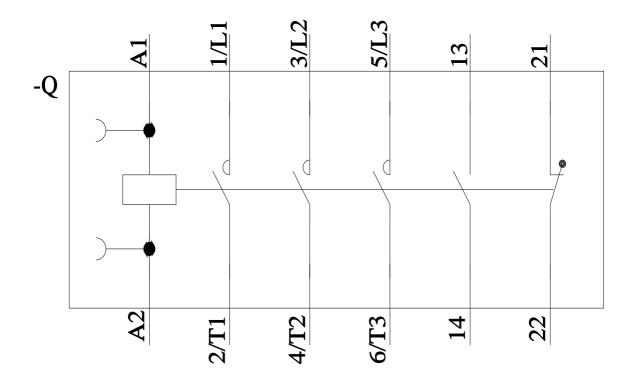
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2027-1AB00&objecttype=14&gridview=view1











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