SIEMENS

Data sheet

3RT2045-1AK60

CONTACTOR, AC3: 37KW/400V, 1NO+1NC,110VAC 50HZ/120V 60HZ, 3-POLE, 3NO, SIZE: S3, SCREW TERMINALS



Figure similar

Product brand name	SIRIUS
Product designation	Power contactor
Product type designation	3RT2
General technical data	
Size of contactor	S3
Product extension	
 function module for communication 	No
Auxiliary switch	Yes
Insulation voltage	
• rated value	1 000 V
Degree of pollution	3
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
 between coil and main contacts acc. to EN 	690 V
60947-1	
Protection class IP	
• on the front	IP20

• of the terminal	IP00
Shock resistance at rectangular impulse	
• at AC	6.7 g / 5 ms, 4.0 g / 10 ms
Shock resistance with sine pulse	
• at AC	10.6 g / 5 ms, 6.3 g / 10 ms
Mechanical service life (switching cycles)	
 of contactor typical 	10 000 000
 of the contactor with added electronics- 	5 000 000
compatible auxiliary switch block typical	
 of the contactor with added auxiliary switch block typical 	10 000 000
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
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	1 000 V
Operating current	
• at AC-1 at 400 V	
— at ambient temperature 40 °C rated value	125 A
● at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	125 A
— up to 690 V at ambient temperature 60 °C rated value	105 A
• at AC-2 at 400 V rated value	80 A
• at AC-3	
— at 400 V rated value	80 A
— at 500 V rated value	80 A
— at 690 V rated value	58 A
Connectable conductor cross-section in main circuit	
at AC-1	
● at 60 °C minimum permissible	35 mm²
• at 40 °C minimum permissible	50 mm²
Operating current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	34 A

● at 690 V rated value	24 A
Operating current	
• at 1 current path at DC-1	
- at 24 V rated value	100 A
— at 110 V rated value	9 A
— at 220 V rated value	2 A
	0.6 A
— at 440 V rated value	0.4 A
— at 600 V rated value	0.4 A
• with 2 current paths in series at DC-1	100 A
— at 24 V rated value	100 A
— at 110 V rated value	
— at 220 V rated value	10 A
— at 440 V rated value	1.8 A
— at 600 V rated value	1 A
• with 3 current paths in series at DC-1	400.4
— at 24 V rated value	100 A
— at 110 V rated value	100 A
— at 220 V rated value	80 A
— at 440 V rated value	4.5 A
— at 600 V rated value	2.6 A
Operating current	
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	40 A
— at 110 V rated value	2.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.15 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	100 A
— at 110 V rated value	100 A
— at 220 V rated value	7 A
— at 440 V rated value	0.42 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	100 A
— at 110 V rated value	100 A
— at 220 V rated value	35 A
— at 440 V rated value	0.8 A
— at 600 V rated value	0.35 A
Operating power	
● at AC-1	

— at 230 V rated value	47 kW			
— at 230 V at 60 °C rated value	40 kW			
— at 400 V rated value	82 kW			
— at 400 V at 60 °C rated value	69 kW			
— at 690 V rated value	142 kW			
— at 690 V at 60 °C rated value	119 kW			
• at AC-2 at 400 V rated value	37 kW			
● at AC-3				
— at 230 V rated value	22 kW			
— at 400 V rated value	37 kW			
— at 500 V rated value	45 kW			
— at 690 V rated value	55 kW			
Operating power for approx. 200000 operating cycles at AC-4				
• at 400 V rated value	17.9 kW			
• at 690 V rated value	21.8 kW			
Thermal short-time current limited to 10 s	760 A			
Power loss [W] at AC-3 at 400 V for rated value of	5.3 W			
the operating current per conductor				
No-load switching frequency	5 000 / //			
• at AC	5 000 1/h			
Operating frequency	000.4/h			
• at AC-1 maximum	900 1/h			
• at AC-2 maximum	400 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	110 V			
• at 60 Hz rated value	120 V			
Operating range factor control supply voltage rated value of magnet coil at AC				
● at 50 Hz	0.8 1.1			
● at 60 Hz	0.8 1.1			
Apparent pick-up power of magnet coil at AC				
• at 50 Hz	326 V·A			
• at 60 Hz	326 V·A			
Inductive power factor with closing power of the coil				
● at 50 Hz	0.62			
• at 60 Hz	0.55			
Apparent holding power of magnet coil at AC				

● at 50 Hz	22 V·A
• at 60 Hz	22 V·A
Inductive power factor with the holding power of the	
coil	
● at 50 Hz	0.36
• at 60 Hz	0.4
Closing delay	
• at AC	13 50 ms
Opening delay	
• at AC	10 21 ms
Arcing time	10 20 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
Operating current at AC-12 maximum	10 A
Operating current at AC-15	
• at 230 V rated value	6 A
• at 400 V rated value	3 A
• at 500 V rated value	2 A
• at 690 V rated value	1 A
Operating 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
Operating 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)

Full-load current (FLA) for three-phase AC motor 97 A • at 480 V rated value 77 A • at 600 V rated value 62 A Yielded mechanical performance (hp)	UL/CSA ratings				
at 600 V rated value 62 A Yielded mechanical performance (bp) - • for single-phase AC motor 7.5 hp - at 1230 V rated value 15 hp • for three-phase AC motor - - at 230 V rated value 25 hp • for three-phase AC motor - - at 200/208 V rated value 26 hp - at 200/208 V rated value 60 hp - at 460/480 V rated value 60 hp - at 4575/600 V rated value 60 hp Contact rating of auxiliary contacts according to UL A600 / P600 Short-circuit protection of the main circuit - - with type of coordination 1 required gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A - with type of coordination 1 required gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A • for short-circuit protection of the auxiliary switch required required • for short-circuit protection of the auxiliary switch required 1/180° rotation possible on vertical mounting surface: can be tilted forward and backward by +/- 22.5° on vertical mounting surface • Side-by-side mounting Yes Height 140 mm Vidtid 70 mm Depth					
Vield Product interchanical performance [tp] • for single-phase AC motor 7.5 hp - at 130 V120 V rated value 7.5 hp - at 230 V rated value 25 hp - at 200/208 V rated value 26 hp - at 200/208 V rated value 30 hp - at 200/208 V rated value 60 hp - at 200/208 V rated value 60 hp - at 250/500 V rated value 60 hp - at 55/600 V rated value 60 hp Contect rafing of auxiliary contacts according to UL A600 / P600 Short-circuit protection of the main circuit gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A - with type of coordination 1 required gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A - with type of assignment 2 required gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A - with type of assignment 2 required gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A - with type of assignment 2 required gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A Installation/ mounting / dimensions +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting varface Mounting type screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715	• at 480 V rated value	77 A			
 for single-phase AC motor at 110/120 V rated value 7.5 hp at 230 V rated value 15 hp for three-phase AC motor at 220/230 V rated value 25 hp at 220/230 V rated value 30 hp at 220/230 V rated value 60 hp contact rating of auxiliary contacts according to UL A600 / P600 contact rating of auxiliary contacts according to UL A600 / P600 contact rating of auxiliary contacts according to UL A600 / P600 contact rating of auxiliary contacts according to UL Short-circuit protection contact rating of auxiliary contacts according to UL a tity protection of the main circuit with type of coordination 1 required gL/gG NH 3NA, DIAZED S5B, NEOZED 5SE: 250 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A<td>• at 600 V rated value</td><td colspan="3">62 A</td>	• at 600 V rated value	62 A			
- at 110/120 V rated value7.5 hp- at 230 V rated value15 hp- at 200/208 V rated value25 hp- at 220/230 V rated value30 hp- at 220/230 V rated value60 hp- at 460/480 V rated value60 hp- at 575/600 V rated value60 hpContext rating of auxiliary contexts according to ULA600 / P600Short-circuit protection- with type of coordination 1 requiredgL/gG NH 3NA, DIAZED SSB, NEOZED SSE: 250 A- with type of coordination 1 requiredgL/gG NH 3NA, DIAZED SSB, NEOZED SSE: 160 A- with type of coordination 1 requiredgL/gG NH 3NA, DIAZED SSB, NEOZED SSE: 160 A- with type of coordination 1 requiredgL/gG NH 3NA, DIAZED SSB, NEOZED SSE: 160 A- with type of coordination 1 requiredgL/gG NH 3NA, DIAZED SSB, NEOZED SSE: 160 A- with type of coordination 1 requiredgL/gG NH 3NA, DIAZED SSB, NEOZED SSE: 160 A- with type of coordination 1 requiredgL/gG NH 3NA, DIAZED SSB, NEOZED SSE: 160 A- with type of coordination 1 requiredgL/gG NH 3NA, DIAZED SSB, NEOZED SSE: 160 A- for short-circuit protection of the auxiliary switch requiredreduited forward and backward by +/- 22.5' on vertical mounting surfaceMounting typescrew and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715• Side-by-side mountingYesHeight140 mmVicth70 mm• forwards0 mm- forwards0 mm- forwards0 mm- forwards0 mm- th th side0 mm	Yielded mechanical performance [hp]				
- at 230 V rated value15 hp• for three-phase AC motor25 hp- at 200/208 V rated value30 hp- at 220/230 V rated value30 hp- at 460/480 V rated value60 hp- at 4575/600 V rated value60 hpContact rating of auxiliary contacts according to ULA600 / P600Short-circuit protection of the main circuitgL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A- with type of assignment 2 requiredgL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A- with type of assignment 2 requiredgL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A- for short-circuit protection of the auxiliary switch requiredfise gG: 10 ANounting position+/180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surfaceMounting typescrew and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715• Side-by-side mountingYesHeight140 mmVidith70 mmDepth152 mm• for wards0 mm- forwards0 mm- gakwards0 mm- upwards0 mm- downwards0 mm- downwards0 mm- at the side0 mm- forwards0 mm- downwards0 mm- downwards0 mm- downwards0 mm- downwards0 mm- forwards0 mm	 for single-phase AC motor 				
• for three-phase AC motor25 hp- at 200208 V rated value20 hp- at 220/230 V rated value80 hp- at 460/480 V rated value60 hp- at 460/480 V rated value60 hp- at 575/600 V rated valueA600 / P600Short-circuit protectionDesign of the tase link• for short-circuit protection of the main circuit- with type of coordination 1 requiredgL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A• for short-circuit protection of the auxiliary switch requiredgL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 180 A• for short-circuit protection of the auxiliary switch required+/180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/. 22.5° on vertical mounting surfaceMounting position+/180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/. 22.5° on vertical mounting surfaceMounting typescrew and snap-on mounting onto 35 mm standard mounting according to IN EN 60715• Side-by-side mounting • forwards140 mmWith the-by-side mountingYesHeight140 mmWith side-by-side mounting • forwards0 mm- forwards0 mm- glowards0 mm- glowards0 mm- the side0 mm- the side0 mm- the side0 mm- the side0 mm- forwards0 mm- the side0 mm- forwards0 mm- forwards0 mm	— at 110/120 V rated value	7.5 hp			
- at 200/208 V rated value25 hp- at 220/230 V rated value30 hp- at 460/480 V rated value60 hp- at 457/500 V rated value60 hpContext rating of auxiliary contacts according to ULA600 / P600Shot-circuit protection4600 / P600Shot-circuit protection of the main circuitgL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A- with type of coordination 1 requiredgL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A- with type of coordination 1 requiredgL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 Afor short-circuit protection of the auxiliary switchfuse gG: 10 Arequired*/180° rotation possible on vertical mounting sufface; can be tilted forward and backward by +/- 22.5° on vertical mounting sufface; can be tilted forward and backward by +/- 22.5° on vertical mounting sufface; can be tilted forward and backward by +/- 22.5° on vertical mounting sufface; exifaceMounting typescrew and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715• Side-by-side mountingYesHeight140 mmVickth70 mmDepth152 mm• with side-by-side mounting - forwards0 mm- forwards0 mm- downwards0 mm- downwards0 mm- at the side0 mm- forwards0 mm	— at 230 V rated value	15 hp			
- at 220/230 V rated value30 hp- at 460/480 V rated value60 hp- at 575/600 V rated value60 hpContact rating of auxiliary contacts according to ULA600 / P600Short-circuit protection- with type of coordination 1 requiredgl/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A- with type of coordination 1 requiredgl/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A- with type of assignment 2 requiredgl/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A- for short-circuit protection of the auxiliary switchfuse gG: 10 Arequired*/180° rotation possible on vertical mounting surface; can be titled forward and backward by +/- 22.5° on vertical mounting surface;Mounting typescrew and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715• Side-by-side mounting140 mmWoith140 mmPepth152 mmRequired specing0 mm- forwards0 mm- growards0 mm- downwards0 mm- downwards0 mm- downwards0 mm- downwards0 mm- downwards0 mm- at the side0 mm	 for three-phase AC motor 				
- at 460/480 V rated value 60 hp - at 575/600 V rated value 60 hp Contact rating of auxiliary contacts according to UL A600 / P600 Short-circuit protection A600 / P600 Short-circuit protection of the main circuit - with type of coordination 1 required - with type of assignment 2 required gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A - with type of assignment 2 required gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A • for short-circuit protection of the auxiliary switch required fuse gG: 10 A Installation/ mounting/ dimensions +/180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface Mounting type screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 • Side-by-side mounting Yes Height 140 mm Width 70 mm Depth 152 mm Required spacing 0 mm • with side-by-side mounting 0 mm - forwards 0 mm - at the side 0 mm - downwards 0 mm - at the side 0 mm	— at 200/208 V rated value	25 hp			
- at 575/600 V rated value 60 hp Contact rating of auxiliary contacts according to UL A600 / P600 Short-circuit protection gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A - with type of coordination 1 required gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A - with type of assignment 2 required fuse gG: 10 A • for short-circuit protection of the auxiliary switch required fuse gG: 10 A • for short-circuit protection of the auxiliary switch required screw and snap-on mounting outrigs on vertical mounting surface; can be tilled forward and backward by +/- 22.5° on vertical mounting surface Mounting type screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 • Side-by-side mounting Yes Height 140 mm Vitth 70 mm Depth 152 mm • with side-by-side mounting 0 mm - forwards 0 mm - upwards 0 mm - downwards 0 mm - at the side 0 mm - forwards 0 mm	— at 220/230 V rated value	30 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 gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A — with type of coordination 1 required gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A — with type of assignment 2 required gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A • for short-circuit protection of the auxiliary switch required fuse gG: 10 A Installation/ mounting/ dimensions +/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 rail according to DIN EN 60715 • Side-by-side mounting Yes Height 140 mm Witth 70 mm Depth 152 mm • with side-by-side mounting 0 mm - forwards 0 mm - upwards 0 mm - downwards 0 mm - at the side 0 mm - forwards 0 mm	— at 460/480 V rated value	60 hp			
Short-circuit protection Design of the fuse link • for short-circuit protection of the main circuit with type of coordination 1 required with type of assignment 2 required • 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 +/- 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 rail according to DIN EN 60715 • Side-by-side mounting Yes Height 140 mm Witth 70 mm Depth 152 mm • downwards 0 mm - downwards<	— at 575/600 V rated value	60 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 for short-circuit protection of the auxiliary switch required gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A Installation/ mounting/ dimensions gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A Installation/ mounting/ dimensions 	Contact rating of auxiliary contacts according to UL	A600 / P600			
• for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch requiredgL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A fuse gG: 10 AInstallation/ mounting/ dimensionstuse gG: 10 AInstallation/ mounting/ dimensionstuse gG: 10 AMounting positiont/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by t/- 22.5° on vertical mounting surfaceMounting typescrew and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715• Side-by-side mountingYesHeight140 mmWidth70 mmDepth152 mmRequired spacing — forwards0 mm• at he side0 mm• at he side0 mm• for grounded parts — forwards0 mm	Short-circuit protection				
with type of coordination 1 requiredgL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A with type of assignment 2 requiredgL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 Afor short-circuit protection of the auxiliary switchfuse gG: 10 AInstallation/ mounting/ dimensionsMounting position+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting rail according to DIN EN 60715Mounting typescrew and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715• Side-by-side mounting140 mmWidth70 mmDepth152 mm• with side-by-side mounting0 mm- forwards0 mm- gackwards0 mm- upwards0 mm- downwards0 mm- downwards0 mm- downwards0 mm- for grounded parts0 mm- forwards0 mm- forwards0 mm- forwards0 mm- forwards0 mm- downwards0 mm- forwards0 mm- forwards	Design of the fuse link				
	 for short-circuit protection of the main circuit 				
• for short-circuit protection of the auxiliary switch required fuse gG: 10 A Installation/ mounting/ dimensions Installation 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 and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting rail according to DIN EN 60715 • Side-by-side mounting Screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 • Side-by-side mounting Yes Height 140 mm Width 70 mm Depth 152 mm Required spacing 0 mm • with side-by-side mounting 0 mm - forwards 0 mm - adwards 0 mm - upwards 0 mm - downwards 0 mm - at the side 0 mm • for grounded parts 0 mm - forwards 0 mm	 — with type of coordination 1 required 	gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 250 A			
required Installation/ mounting/ dimensions Mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface Mounting type screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 • Side-by-side mounting Yes Height 140 mm Width 70 mm Depth 152 mm Required spacing omm • forwards 0 mm - gackwards 0 mm - upwards 0 mm - downwards 0 mm - at the side 0 mm • for grounded parts 0 mm - forwards 0 mm	- with type of assignment 2 required	gL/gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 160 A			
Installation/ mounting/ dimensions Mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface Mounting type screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 • Side-by-side mounting Height Yes Height Yes Height Yes Height 140 mm Vidth 70 mm Depth 152 mm Required spacing • with side-by-side mounting 9 mm 6 minumed and according to mm 9 minumed and ac	 for short-circuit protection of the auxiliary switch 	fuse gG: 10 A			
Mounting position+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surfaceMounting typescrew and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715• Side-by-side mountingYesHeight140 mmWidth70 mmDepth152 mmRequired spacing0 mm- forwards0 mm- gackwards0 mm- upwards0 mm- downwards0 mm- at the side0 mm- for grounded parts0 mm- forwards0 mm	required				
tilled forward and backward by +/- 22.5° on vertical mounting surfaceMounting typescrew and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715• Side-by-side mountingYesHeight140 mmWidth70 mmDepth152 mmRequired spacing-• with side-by-side mounting0 mm- forwards0 mm- forwards0 mm- gackwards0 mm- upwards0 mm- upwards0 mm- forgrounded parts0 mm- forwards0 mm- forwards0 mm- forwards0 mm- forwards0 mm- other width0 mm	Installation/ mounting/ dimensions				
• Side-by-side mountingaccording to DIN EN 60715• Side-by-side mountingYesHeight140 mmWidth70 mmDepth152 mmRequired spacing-• with side-by-side mounting0 mm- forwards0 mm- Backwards0 mm- upwards0 mm- downwards0 mm- at the side0 mm- for grounded parts0 mm- forwards0 mm- forwards0 mm- forwards0 mm- at the side0 mm- forwards0 mm	Mounting position	tilted forward and backward by +/- 22.5° on vertical mounting			
Height140 mmWidth70 mmDepth152 mmRequired spacing-• with side-by-side mounting forwards0 mm- forwards0 mm- Backwards0 mm- upwards0 mm- downwards0 mm- for grounded parts0 mm- forwards0 mm- forwards0 mm- forwards0 mm- muth side0 mm- muth s	Mounting type				
Width70 mmDepth152 mmRequired spacing	 Side-by-side mounting 	Yes			
Depth152 mmRequired spacing152 mm• with side-by-side mounting forwards0 mm- forwards0 mm- Backwards0 mm- upwards0 mm- downwards0 mm- downwards0 mm- forgrounded parts0 mm- forwards0 mm- forwards0 mm	Height	140 mm			
Required spacing• with side-by-side mounting- forwards0 mm- Backwards0 mm- upwards0 mm- downwards0 mm- at the side0 mm• for grounded parts- forwards0 mm	Width	70 mm			
 with side-by-side mounting forwards Backwards upwards downwards downwards for grounded parts forwards 0 mm 	-	152 mm			
- forwards0 mm- Backwards0 mm- upwards0 mm- downwards0 mm- at the side0 mm• for grounded parts0 mm- forwards0 mm	Required spacing				
	 with side-by-side mounting 				
upwards 0 mm downwards 0 mm at the side 0 mm • for grounded parts 0 mm forwards 0 mm	— forwards	0 mm			
- downwards 0 mm - at the side 0 mm • for grounded parts 0 mm - forwards 0 mm	— Backwards	0 mm			
	— upwards	0 mm			
for grounded parts	— downwards	0 mm			
— forwards 0 mm	— at the side	0 mm			
	 for grounded parts 				
— Backwards 0 mm	— forwards	0 mm			
	— Backwards	0 mm			

— upwards	10 mm
— at the side	10 mm
— downwards	10 mm
• for live parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	10 mm
— downwards	10 mm
— at the side	10 mm
Connections/Terminals	
Type of electrical connection	
• for main current circuit	screw-type terminals
 for auxiliary and control current circuit 	screw-type terminals
Type of connectable conductor cross-sections	
• for main contacts	
 finely stranded with core end processing 	2x (2.5 35 mm²), 1x (2.5 50 mm²)
 at AWG conductors for main contacts 	2x (10 1/0), 1x (10 2)
Type of connectable conductor cross-sections	
 for auxiliary contacts 	
 — single or multi-stranded 	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)
 finely stranded with core end processing 	
— Intery stranded with core end processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
at AWG conductors for auxiliary contacts	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14)
• at AWG conductors for auxiliary contacts	
at AWG conductors for auxiliary contacts Safety related data	
at AWG conductors for auxiliary contacts Safety related data B10 value	2x (20 16), 2x (18 14)
at AWG conductors for auxiliary contacts Safety related data B10 value with high demand rate acc. to SN 31920	2x (20 16), 2x (18 14)

Yes

No

20 y

Product function

1

IEC 61508

• Mirror contact acc. to IEC 60947-4-1

Protection against electrical shock

• positively driven operation acc. to IEC 60947-5-

T1 value for proof test interval or service life acc. to

finger-safe when touched vertically from front acc. to IEC 60529

General Produc	t Approval			Declaration of Conformity	Test Certificates
	CSA		EHC	EG-Konf.	<u>Type Test</u> Certificates/Test <u>Report</u>
Test	Marine / Shipp	ing			
Certificates					
Special Test Certificate	ABS	B U R E A U VERITAS	GL GL	Lloyd's Register	RMRS
Marine /	other	Railway			
Shipping					
DNV-GL DNVGLCOM/AF	<u>Confirmation</u>	Vibration and Shock			

Further information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

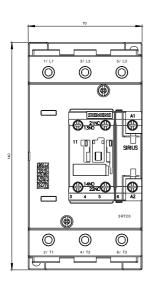
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2045-1AK60

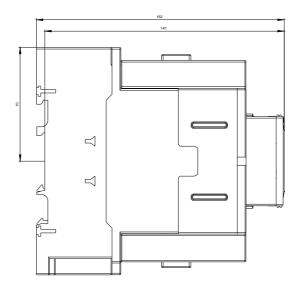
Cax online generator

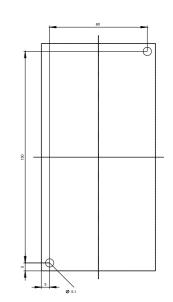
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2045-1AK60

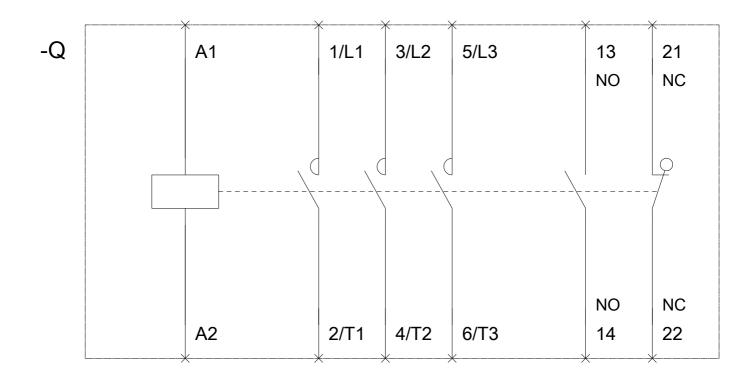
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT2045-1AK60

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2045-1AK60&lang=en









last modified:

10/13/2017