## **SIEMENS**

Data sheet 3RT1054-1AF36



power contactor, AC-3 115 A, 55 kW / 400 V AC (50-60 Hz) / DC operation 110-127 V AC/DC auxiliary contacts 2 NO + 2 NC 3-pole, frame size S6 with box terminals drive: conventional screw terminal

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT1
General technical data	
size of contactor	S6
product extension	
<ul> <li>function module for communication</li> </ul>	No
auxiliary switch	Yes
power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	21 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	7 W
<ul> <li>without load current share typical</li> </ul>	5.2 W
insulation voltage	
<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	1 000 V
<ul> <li>of auxiliary circuit with degree of pollution 3 rated value</li> </ul>	500 V
surge voltage resistance	
<ul> <li>of main circuit rated value</li> </ul>	8 kV
of auxiliary circuit rated value	6 kV
maximum permissible voltage for safe isolation between coil and main contacts acc. to EN 60947-1	690 V
shock resistance at rectangular impulse	
• at AC	8,5g / 5 ms, 4,2g / 10 ms
• at DC	8,5g / 5 ms, 4,2g / 10 ms
shock resistance with sine pulse	
• at AC	13,4g / 5 ms, 6,5g / 10 ms
• at DC	13,4g / 5 ms, 6,5g / 10 ms
mechanical service life (switching cycles)	
of contactor typical	10 000 000
<ul> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> </ul>	5 000 000
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000
reference code acc. to IEC 81346-2	Q
Substance Prohibitance (Date)	01.05.2012
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +60 °C
during storage	-55 +80 °C

relative humidity minimum	10 %
relative humidity at 55 °C acc. to IEC 60068-2-30	95 %
maximum	
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
operational current	
<ul> <li>at AC-1 at 400 V at ambient temperature 40 °C rated value</li> <li>at AC-1</li> </ul>	160 A
— up to 690 V at ambient temperature 40 °C rated value	160 A
<ul> <li>up to 690 V at ambient temperature 60 °C rated value</li> </ul>	140 A
— up to 1000 V at ambient temperature 40 $^{\circ}\text{C}$ rated value	80 A
— up to 1000 V at ambient temperature 60 $^{\circ}\text{C}$ rated value	80 A
• at AC-3	
— at 400 V rated value	115 A
— at 500 V rated value	115 A
— at 690 V rated value	115 A
— at 1000 V rated value	53 A
at AC-4 at 400 V rated value	97 A
at AC-5a up to 690 V rated value	140 A
<ul><li>at AC-5b up to 400 V rated value</li><li>at AC-6a</li></ul>	95 A
— up to 230 V for current peak value n=20 rated value	115 A
— up to 400 V for current peak value n=20 rated value	115 A
<ul> <li>up to 500 V for current peak value n=20 rated value</li> <li>up to 690 V for current peak value n=20 rated</li> </ul>	115 A
value  — up to 1000 V for current peak value n=20 rated  — up to 1000 V for current peak value n=20 rated	53 A
value  • at AC-6a	
up to 230 V for current peak value n=30 rated value	98 A
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	98 A
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	98 A
— up to 690 V for current peak value n=30 rated value	98 A
— up to 1000 V for current peak value n=30 rated value	53 A
minimum cross-section in main circuit at maximum AC-1 rated value	70 mm²
operational current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	54 A
at 690 V rated value	48 A
operational current	
• at 1 current path at DC-1	400 A
— at 24 V rated value	160 A
— at 110 V rated value	18 A
— at 220 V rated value	3.4 A
— at 440 V rated value	0.8 A
— at 600 V rated value	0.5 A
<ul> <li>with 2 current paths in series at DC-1</li> </ul>	

— at 24 V rated value	160 A
— at 110 V rated value	160 A
— at 220 V rated value	20 A
— at 440 V rated value	3.2 A
— at 600 V rated value	1.6 A
<ul> <li>with 3 current paths in series at DC-1</li> </ul>	
— at 24 V rated value	160 A
— at 110 V rated value	160 A
— at 220 V rated value	160 A
— at 440 V rated value	11.5 A
— at 600 V rated value	4 A
<ul> <li>at 1 current path at DC-3 at DC-5</li> </ul>	
— at 24 V rated value	160 A
— at 110 V rated value	2.5 A
— at 220 V rated value	0.6 A
— at 440 V rated value	0.17 A
— at 600 V rated value	0.12 A
• with 2 current paths in series at DC-3 at DC-5	0.127
— at 24 V rated value	160 A
— at 110 V rated value	160 A
— at 110 V rated value  — at 220 V rated value	2.5 A
— at 440 V rated value	0.65 A
— at 600 V rated value	0.37 A
with 3 current paths in series at DC-3 at DC-5	400 A
— at 24 V rated value	160 A
— at 110 V rated value	160 A
— at 220 V rated value	160 A
— at 440 V rated value	1.4 A
— at 600 V rated value	0.75 A
operating power	
• at AC-3	
— at 230 V rated value	37 kW
— at 400 V rated value	55 kW
— at 500 V rated value	75 kW
— at 690 V rated value	110 kW
— at 1000 V rated value	75 kW
operating power for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	29 kW
at 690 V rated value	48 kW
operating apparent power at AC-6a	
• up to 230 V for current peak value n=20 rated value	40 000 kVA
• up to 400 V for current peak value n=20 rated value	80 000 VA
<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	100 000 VA
• up to 690 V for current peak value n=20 rated value	130 000 VA
• up to 1000 V for current peak value n=20 rated	90 000 VA
value	
operating apparent power at AC-6a	
• up to 230 V for current peak value n=30 rated value	30 000 VA
• up to 400 V for current peak value n=30 rated value	60 000 VA
• up to 500 V for current peak value n=30 rated value	80 000 VA
• up to 690 V for current peak value n=30 rated value	110 000 VA
up to 1000 V for current peak value n=30 rated value	90 000 VA
short-time withstand current in cold operating state up to 40 °C	
limited to 1 s switching at zero current maximum	2 565 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	1 654 A; Use minimum cross-section acc. to AC-1 rated value
Iimited to 10 s switching at zero current maximum	1 170 A; Use minimum cross-section acc. to AC-1 rated value
limited to 30 s switching at zero current maximum	729 A; Use minimum cross-section acc. to AC-1 rated value
limited to 60 s switching at zero current maximum	572 A; Use minimum cross-section acc. to AC-1 rated value
	The state of the s

no-load switching frequency	
• at AC	2 000 1/h
• at DC	2 000 1/h
operating frequency	
at AC-1 maximum	800 1/h
• at AC-2 maximum	400 1/h
• at AC-3 maximum	1 000 1/h
at AC-4 maximum	130 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage at AC	
at 50 Hz rated value	110 127 V
at 60 Hz rated value	110 127 V
control supply voltage at DC	
• rated value	110 127 V
operating range factor control supply voltage rated value of magnet coil at DC	
• initial value	0.8
full-scale value	1.1
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
design of the surge suppressor	with varistor
apparent pick-up power of magnet coil at AC	
● at 50 Hz	300 VA
● at 60 Hz	300 VA
inductive power factor with closing power of the coil	
● at 50 Hz	0.9
● at 60 Hz	0.9
apparent holding power of magnet coil at AC	
● at 50 Hz	5.8 VA
● at 60 Hz	5.8 VA
inductive power factor with the holding power of the coil	
● at 50 Hz	0.8
● at 60 Hz	0.8
closing power of magnet coil at DC	360 W
holding power of magnet coil at DC	5.2 W
closing delay	
• at AC	20 95 ms
• at DC	20 95 ms
opening delay	
• at AC	40 60 ms
• at DC	40 60 ms
arcing time	10 15 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous contact	2
number of NO contacts for auxiliary contacts instantaneous contact	2
operational current at AC-12 maximum	10 A
anamatic nel cumuent et AC AE	
operational current at AC-15	
at 230 V rated value	6 A
<ul><li>at 230 V rated value</li><li>at 400 V rated value</li></ul>	3 A
<ul><li>at 230 V rated value</li><li>at 400 V rated value</li><li>at 500 V rated value</li></ul>	3 A 2 A
<ul> <li>at 230 V rated value</li> <li>at 400 V rated value</li> <li>at 500 V rated value</li> <li>at 690 V rated value</li> </ul>	3 A
<ul> <li>at 230 V rated value</li> <li>at 400 V rated value</li> <li>at 500 V rated value</li> <li>at 690 V rated value</li> </ul> operational current at DC-12	3 A 2 A 1 A
<ul> <li>at 230 V rated value</li> <li>at 400 V rated value</li> <li>at 500 V rated value</li> <li>at 690 V rated value</li> </ul>	3 A 2 A

# at 60 V rated value		
a   125 V rated value	<ul><li>at 60 V rated value</li></ul>	6 A
	<ul><li>at 110 V rated value</li></ul>	3 A
	<ul> <li>at 125 V rated value</li> </ul>	2 A
Operational current at DC-13     • all 44 y rated value	at 220 V rated value	1 A
	at 600 V rated value	0.15 A
at 48 V rated value	operational current at DC-13	
• at 60 V rated value • at 11 TO V rated value • at 120 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 80 V rated value • for 3-phase AC motor  — at 230 V rated value • for 3-phase AC motor  — at 200/280 V rated value • at 400/480 V rated value • at 800 V rated value • for 3-phase AC motor  — at 575/600 V rated value  contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link • for short-circuit protection of the main circuit — with type of assignment 2 required • for short-circuit protection of the main circuit — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required  installation/mounting/dimensions  mounting position  fastening method • side-by-side mounting • with side-by-side mounting • with side-by-side mounting — forwards — upwards — ownwards • for live parts — forwards — ownwards — ownwards • for live parts — forwards — ownwards — ownwar	<ul> <li>at 24 V rated value</li> </ul>	10 A
at 110 V rated value     at 125 V rated value     at 125 V rated value     at 220 V rated value     contact reliability of auxiliary contacts     to 1500 V rated value     contact reliability of auxiliary contacts	<ul> <li>at 48 V rated value</li> </ul>	2 A
at 128 V rated value	<ul><li>at 60 V rated value</li></ul>	2 A
	at 110 V rated value	1 A
• at 800 V rated value	at 125 V rated value	0.9 A
Taulty switching per 100 million (17 V, 1 mA)	at 220 V rated value	0.3 A
Tull-load current (FLA) for 3-phase AC motor           • at 480 V rated value         125 A           yielded mechanical performance [hp]         • of single-phase AC motor           - at 230 V rated value         25 hp           • for 3-mphase AC motor         40 hp           - at 220203 V rated value         50 hp           - at 460480 V rated value         100 hp           - at 460480 V rated value         100 hp           - at 460480 V rated value         100 hp           - at 575/600 V rated value         100 hp           - at 575/600 V rated value         125 hp           contact rating of auxiliary contacts according to UL         A600 / Q600           Short-circuit protection         40 hp           - for short-circuit protection of the main circuit         gG: 355 A (690 V, 100 kA)           - with type of coordination 1 required         gG: 355 A (690 V, 100 kA)           - with type of assignment 2 required         yG: 250 A (690 V, 100 kA), alt: 200 A (690 V, 50 kA), BS88: 250 A (415 V, 50 kA)           • for short-circuit protection of the auxiliary switch required         yG: 10 A (500 V, 10 kA)           • for short-circuit protection of the auxiliary switch required         yG: 226 A (690 V, 100 kA), alt: 200 A (690 V, 50 kA), BS88: 250 A (415 V, 50 kA)           • fastellation/mounting/dimensions         with side-by-side mounting	at 600 V rated value	0.1 A
Tull-load current (FLA) for 3-phase AC motor   • at 480 V rated value   125 A	contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
Tull-load current (FLA) for 3-phase AC motor   • at 480 V rated value   125 A		
• at 480 V rated value		
• at 600 V rated value   125 A		124 Δ
vielded mechanical performance [hp]     of or single-phase AC motor		
• for single-phase AC motor — at 230 V rated value • for 3-hpase AC motor — at 200/220 V rated value — at 220/230 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value  contact rating of auxillary contacts according to UL  Short-circuit protection  design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required — with type of assignment 2 required — with nequired — with speed coordination of the auxiliary switch required required  Installation/mounting/dimensions  mounting position  fastening method • side-by-side mounting • side-by-side mounting  with vertical mounting surface +/-90° rotatable, with vertical mounting  fastening method • side-by-side mounting  • with side-by-side mounting  • with side-by-side mounting  • with side-by-side mounting  • of morards — upwards — the side — of moranded parts — forwards — the side — of or grounded parts — forwards — the side — of or grounded parts — forwards — the side — of or grounded parts — forwards — the side — of or grounded parts — forwards — the side — of or grounded parts — forwards — at the side — of or grounded parts — forwards — ownwards — o		1207
■ to 73-phase AC motor     ■ at 200/208 V rated value     ■ at 220/230 V rated value     ■ at 220/230 V rated value     ■ at 460/480 V rated value     ■ at 575/600 V rated value     ■ at 675/600 V rated value		
		25 hn
- at 200/208 V rated value		20 TIP
- at 220/230 V rated value	·	40.1
- at 460/480 V rated value		•
- at 575/600 V rated value  contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link  • for short-circuit protection of the main circuit  - with type of coordination 1 required  - 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    side-by-side mounting / dimensions		·
contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link  • for short-circuit protection of the main circuit  — with type of coordination 1 required  — with type of assignment 2 required  • for short-circuit protection of the auxiliary switch required required  • for short-circuit protection of the auxiliary switch required required  • for short-circuit protection of the auxiliary switch required required surface +/- 22.5° tiltable to the front and back screw fixing  **To muniting position  **To mm  **To mm  **To mm  **Tequired spacing**  • with side-by-side mounting  • with side-by-side mounting  — at the side  — downwards — upwards — upwards — upwards — upwards — upwards — to for grounded parts — forwards — to side our side of the side — downwards — to mm  • for live parts — forwards — upwards — upwards — at the side — downwards — to mm  • for live parts — forwards — upwards — upwards — upwards — to mm  • for live parts — forwards — upwards — downwards — downwards — to mm  • for live parts — forwards — upwards — downwards		
Short-circuit protection   design of the fuse link   • for short-circuit protection of the main circuit   — with type of coordination 1 required   gG: 355 A (690 V, 100 kA)   gG: 250 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 250 A (415 V, 50 kA)     • for short-circuit protection of the auxiliary switch required   required   gG: 10 A (500 V, 1 kA)     • for short-circuit protection of the auxiliary switch required   gG: 10 A (500 V, 1 kA)     • for short-circuit protection of the auxiliary switch required   gG: 10 A (500 V, 1 kA)     • for short-circuit protection of the auxiliary switch required   gG: 10 A (500 V, 1 kA)     • for short-circuit protection of the auxiliary switch required   gG: 250 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 250 A (415 V, 50 kA)     • for short-circuit protection of the auxiliary switch required   gG: 250 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 250 A (415 V, 50 kA)     • for short-circuit protection of the auxiliary switch required   gG: 250 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 250 A (415 V, 50 kA)     • for short-circuit protection of the auxiliary switch required   gG: 250 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 250 A (415 V, 50 kA)     • for short-circuit protection of the auxiliary switch required   gG: 250 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 250 A (415 V, 50 kA)     • for short-circuit protection of the auxiliary switch required   gG: 250 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 250 A (415 V, 50 kA)     • for short-circuit protection of the auxiliary switch required   gG: 250 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 250 A (415 V, 50 kA)     • for short-circuit protection of the auxiliary switch required   gG: 250 A (415 V, 50 kA)     • for short-circuit protection of the auxiliary switch required   gG: 250 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA)     • for short-circuit protection of the auxiliary switch required   gG: 250 A (415 V, 50 kA)     • for short-circuit protection of the au		
design of the fuse link	contact rating of auxiliary contacts according to UL	A600 / Q600
• for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required 9G: 250 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 250 A (415 V, 50 kA) • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/-22.5° tiltable to the front and back  fastening method • side-by-side mounting • side-by-side mounting  with side-by-side mounting  • orwards — upwards — downwards — at the side  • for grounded parts — forwards — upwards — at the side — downwards  • for live parts — forwards — upwards — upwards — at the side — downwards — to mm  • for live parts — forwards — upwards — upwards — upwards — upwards — to mm  • for live parts — forwards — upwards — upwards — upwards — upwards — upwards — to mm  • for live parts — forwards — upwards — upwards — upwards — upwards — upwards — to mm  • for live parts — forwards — upwards — upwa	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 required - for short-circuit protection of the auxiliary switch required - for short-circuit protection of the auxiliary switch required - for short-circuit protection of the auxiliary switch required - for short-circuit protection of the auxiliary switch required - for short-circuit protection of the auxiliary switch required - for short-circuit protection of the auxiliary switch gG: 10 A (500 V, 1 kA) - gG: 10 A (500 V, 10 kA), aM: 200 A (690 V, 50 kA), BS88: 250 A (415 V, 50 kA) - gG: 250 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 250 A (415 V, 50 kA) - gG: 250 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 250 A (415 V, 50 kA) - gG: 200 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 250 A (415 V, 50 kA) - gG: 200 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 250 A (415 V, 50 kA) - gG: 200 A (690 V, 100 kA), aM: 200 A (690 V, 100 kA), aM: 200 A (690 V, 100 kA) - gG: 200 A (690 V, 100 kA), aM: 200 A (690 V, 100 kA), aM: 200 A (690 V, 100 kA), aM: 200 A (690 V, 100 kA) - gG: 10 A (500 V, 100 kA), aM: 200 A (690 V, 100 kA), aM: 200 A (690 V, 100 kA) - gG: 10 A (500 V, 100 kA), aM: 200 A (690 V, 100 kA), aM: 200 A (690 V, 100 kA) - gG: 10 A (500 V, 100 kA) - gG: 10 A (500 V, 10 kA) - gG: 10 A (500 V, 100 kA) - gG: 10 A (500 V, 10 kA) - gG: 10 A (	design of the fuse link	
- with type of assignment 2 required of for short-circuit protection of the auxiliary switch required  of or short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back  screw fixing  of side-by-side mounting  of side-by-side mounting  of with side-by-side mounting  of with side-by-side mounting  of orwards  of upwards  of or grounded parts  of or grounded parts  of orwards  of or	<ul> <li>for short-circuit protection of the main circuit</li> </ul>	
• for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/-22.5° tiltable to the front and back  • side-by-side mounting  • side-by-side mounting  height  172 mm  width  120 mm  depth  required spacing  • with side-by-side mounting  — forwards — upwards — downwards — at the side — of orgrounded parts — forwards — upwards — upwards — upwards — of ownwards — of ownwards — of ownwards — of ownwards — of orgrounded parts — forwards — at the side — downwards — of ownwards — of ownwards — of ownwards — of ownwards — upwards — of ownwards — ownwards	<ul> <li>— with type of coordination 1 required</li> </ul>	gG: 355 A (690 V, 100 kA)
• for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/-22.5° tiltable to the front and back  fastening method • side-by-side mounting  installation/ mounting  • side-by-side mounting  installation/ mounting  installation/ mounting surface +/-90° rotatable, with vertical mounting	<ul> <li>— with type of assignment 2 required</li> </ul>	
Installation/ mounting/ dimensions  mounting position with vertical mounting surface +/-90° rotatable, with vertical mounting +/90°		,
Installation/ mounting/ dimensions  mounting position  with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/-20° rotatable, with vertical mounting +/		gG: 10 A (500 V, 1 kA)
mounting position with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/-22.5° tiltable to the front and back   fastening method screw fixing   • side-by-side mounting Yes   height 172 mm   width 120 mm   depth 170 mm   required spacing    • with side-by-side mounting  — forwards — upwards — upwards — downwards — at the side — of or grounded parts — for grounded parts — for grounded parts — of orwards — upwards — at the side — downwards — at the side — downwards — for live parts — forwards — upwards — upwards — upwards — upwards — upwards — of orwards — upwards — upward	·	
fastening method		
height       172 mm         width       120 mm         depth       170 mm         required spacing       0 mm         • with side-by-side mounting       20 mm         — forwards       20 mm         — upwards       10 mm         — downwards       10 mm         • for grounded parts       0 mm         • for grounded parts       20 mm         — at the side       10 mm         — at the side       10 mm         • for live parts       20 mm         — forwards       20 mm         — upwards       10 mm         • for live parts       20 mm         — upwards       10 mm         — downwards       10 mm         — downwards       10 mm         — at the side       10 mm	mounting position	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back
height         172 mm           width         120 mm           depth         170 mm           required spacing         170 mm           • with side-by-side mounting         20 mm           — forwards         10 mm           — upwards         10 mm           — at the side         0 mm           • for grounded parts         20 mm           — forwards         20 mm           — upwards         10 mm           — at the side         10 mm           • for live parts         20 mm           — upwards         10 mm           — downwards         10 mm           — downwards         10 mm           — at the side         10 mm	fastening method	screw fixing
width         120 mm           depth         170 mm           required spacing         170 mm           • with side-by-side mounting         20 mm           — forwards         20 mm           — upwards         10 mm           — at the side         0 mm           • for grounded parts         20 mm           — upwards         10 mm           — at the side         10 mm           — for live parts         20 mm           — upwards         20 mm           — upwards         10 mm           — downwards         10 mm           — downwards         10 mm           — at the side         10 mm	<ul> <li>side-by-side mounting</li> </ul>	Yes
width         120 mm           depth         170 mm           required spacing	height	172 mm
required spacing		120 mm
required spacing		
<ul> <li>with side-by-side mounting</li> <li>— forwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> <li>— for grounded parts</li> <li>— forwards</li> <li>— upwards</li> <li>— upwards</li> <li>— upwards</li> <li>— at the side</li> <li>— downwards</li> <li>— for live parts</li> <li>— forwards</li> <li>— upwards</li> <li>— upwards</li> <li>— downwards</li> <li>— for live parts</li> <li>— forwards</li> <li>— upwards</li> <li>—</li></ul>		
— forwards       20 mm         — upwards       10 mm         — downwards       10 mm         — at the side       0 mm         • for grounded parts       20 mm         — forwards       20 mm         — upwards       10 mm         — downwards       10 mm         • for live parts       20 mm         — upwards       20 mm         — upwards       10 mm         — downwards       10 mm         — at the side       10 mm		
— upwards       10 mm         — downwards       10 mm         — at the side       0 mm         • for grounded parts       20 mm         — upwards       10 mm         — at the side       10 mm         — downwards       10 mm         — for live parts       20 mm         — upwards       10 mm         — downwards       10 mm         — at the side       10 mm	, and the second	20 mm
— downwards       10 mm         — at the side       0 mm         ● for grounded parts       20 mm         — forwards       10 mm         — at the side       10 mm         — downwards       10 mm         ● for live parts       20 mm         — upwards       20 mm         — upwards       10 mm         — downwards       10 mm         — at the side       10 mm		
<ul> <li>— at the side</li> <li>● for grounded parts</li> <li>— forwards</li> <li>— upwards</li> <li>— at the side</li> <li>— at the side</li> <li>— downwards</li> <li>● for live parts</li> <li>— forwards</li> <li>— upwards</li> <li>— upwards</li> <li>— downwards</li> <li>— downwards</li> <li>— at the side</li> <li>— one</li> <li>0 mm</li> <li>10 mm</li> <li>— downwards</li> <li>— at the side</li> <li>10 mm</li> </ul>	•	
<ul> <li>for grounded parts</li> <li>— forwards</li> <li>— upwards</li> <li>— at the side</li> <li>— downwards</li> <li>• for live parts</li> <li>— forwards</li> <li>— upwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> <li>10 mm</li> <li>— downwards</li> <li>— at the side</li> <li>10 mm</li> <li>— at the side</li> </ul>		
— forwards       20 mm         — upwards       10 mm         — at the side       10 mm         — downwards       10 mm         • for live parts       20 mm         — upwards       20 mm         — upwards       10 mm         — downwards       10 mm         — at the side       10 mm		O mini
<ul> <li>— upwards</li> <li>— at the side</li> <li>— downwards</li> <li>• for live parts</li> <li>— forwards</li> <li>— upwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> <li>10 mm</li> <li>— mm</li> </ul>		20 mm
<ul> <li>— at the side</li> <li>— downwards</li> <li>• for live parts</li> <li>— forwards</li> <li>— upwards</li> <li>— downwards</li> <li>— downwards</li> <li>— at the side</li> </ul>		
<ul> <li>— downwards</li> <li>● for live parts</li> <li>— forwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> <li>10 mm</li> <li>10 mm</li> <li>10 mm</li> </ul>	•	
<ul> <li>◆ for live parts</li> <li>— forwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> </ul> 20 mm 10 mm 10 mm		
— forwards       20 mm         — upwards       10 mm         — downwards       10 mm         — at the side       10 mm		10 111111
<ul> <li>upwards</li> <li>downwards</li> <li>at the side</li> <li>10 mm</li> <li>10 mm</li> <li>10 mm</li> </ul>		20
<ul><li>downwards</li><li>at the side</li><li>10 mm</li><li>10 mm</li></ul>		
— at the side 10 mm	•	
Connections/ Terminals		10 mm
	Connections/ Terminals	

type of electrical connection	
<ul> <li>for main current circuit</li> </ul>	box terminal
<ul> <li>for auxiliary and control circuit</li> </ul>	screw-type terminals
<ul> <li>at contactor for auxiliary contacts</li> </ul>	Screw-type terminals
of magnet coil	Screw-type terminals
type of connectable conductor cross-sections	
<ul> <li>for main contacts</li> </ul>	
— stranded	max. 1x 50, 1x 70 mm <sup>2</sup>
<ul> <li>finely stranded with core end processing</li> </ul>	max. 1x 50, 1x 70 mm <sup>2</sup>
<ul> <li>finely stranded without core end processing</li> </ul>	max. 1x 50, 1x 70 mm <sup>2</sup>
<ul> <li>at AWG cables for main contacts</li> </ul>	2x 1/0
connectable conductor cross-section for main contacts	
• stranded	16 70 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	16 70 mm²
<ul> <li>finely stranded without core end processing</li> </ul>	16 70 mm²
connectable conductor cross-section for auxiliary contacts	
<ul> <li>solid or stranded</li> </ul>	0.5 4 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm²
type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)
<ul><li>— solid or stranded</li></ul>	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), max. 2x (0,75 4 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>at AWG cables for auxiliary contacts</li> </ul>	2x (20 16), 2x (18 14), 1x 12
AWG number as coded connectable conductor cross section	
<ul> <li>for auxiliary contacts</li> </ul>	18 14
Safety related data	
product function	
• mirror contact acc. to IEC 60947-4-1	Yes
<ul> <li>positively driven operation acc. to IEC 60947-5-1</li> </ul>	No
B10 value with high demand rate acc. to SN 31920	1 000 000
protection class IP on the front acc. to IEC 60529	IP20
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front
suitability for use	
<ul> <li>safety-related switching OFF</li> </ul>	Yes
Certificates/ approvals	

## Certificates/ approvals

## **General Product Approval**





Confirmation



<u>KC</u>



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



UK Declaration of Conformity

Special Test Certificate

Type Test Certificates/Test Report

Marine / Shipping	other
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other			Railway	
<u>Miscellaneous</u>	<u>Miscellaneous</u>	Confirmation	Special Test Certific-	

## 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=3RT1054-1AF36

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1054-1AF36

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT1054-1AF36

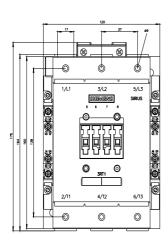
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

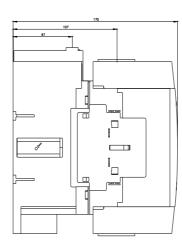
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT1054-1AF36&lang=en

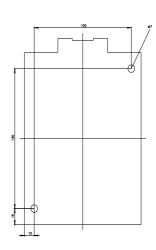
Characteristic: Tripping characteristics, I2t, Let-through current

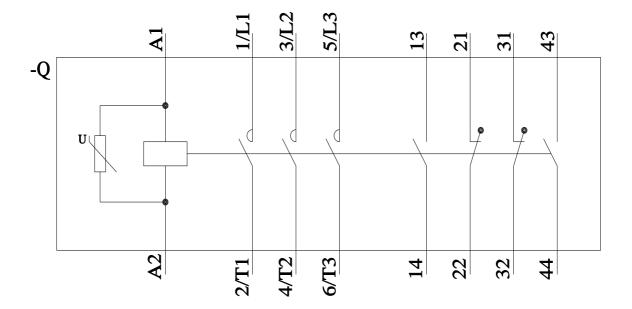
https://support.industry.siemens.com/cs/ww/en/ps/3RT1054-1AF36/char

Further characteristics (e.g. electrical endurance, switching frequency)
<a href="http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1054-1AF36&objecttype=14&gridview=view1">http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1054-1AF36&objecttype=14&gridview=view1</a>









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