SIEMENS

Data sheet 3RT1056-6AF36



power contactor, AC-3e/AC-3 185 A, 90 kW / 400 V AC (50-60 Hz) / DC Uc: 110-127 V 3-pole, auxiliary contacts 2 NO + 2 NC drive: conventional main circuit: busbar control and auxiliary circuit: screw terminal

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT1
General technical data	
size of contactor	S6
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 	39 W
 at AC in hot operating state per pole 	13 W
 without load current share typical 	5.2 W
insulation voltage	
 of main circuit with degree of pollution 3 rated value 	1 000 V
 of auxiliary circuit with degree of pollution 3 rated value 	500 V
surge voltage resistance	
 of main circuit rated value 	8 kV
 of auxiliary circuit rated value 	6 kV
maximum permissible voltage for safe isolation between coil and main contacts according 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
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000
 of the contactor with added auxiliary switch block typical 	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	05/01/2012
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
 during operation 	-25 +60 °C
during storage	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %

Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
 at AC-3 rated value maximum 	1 000 V
 at AC-3e rated value maximum 	1 000 V
operational current	
 at AC-1 at 400 V at ambient temperature 40 °C rated value 	215 A
• at AC-1	
 up to 690 V at ambient temperature 40 °C rated value 	215 A
 up to 690 V at ambient temperature 60 °C rated value 	185 A
 up to 1000 V at ambient temperature 40 °C rated value 	100 A
 up to 1000 V at ambient temperature 60 °C rated value 	100 A
• at AC-3	
— at 400 V rated value	185 A
— at 500 V rated value	185 A
— at 690 V rated value	170 A
— at 1000 V rated value	65 A
• at AC-3e	
— at 400 V rated value	185 A
— at 500 V rated value	185 A
— at 690 V rated value	170 A
— at 1000 V rated value	65 A
at AC-4 at 400 V rated value	160 A
at AC-5a up to 690 V rated value at AC-5b up to 400 V rated value	189 A
at AC-5b up to 400 V rated value	153 A
• at AC-6a	157 A
— up to 230 V for current peak value n=20 rated value	157 A
 — up to 400 V for current peak value n=20 rated value — up to 500 V for current peak value n=20 rated 	157 A
value — up to 690 V for current peak value n=20 rated — up to 690 V for current peak value n=20 rated	157 A
value up to 1000 V for current peak value n=20 rated up to 1000 V for current peak value n=20 rated	65 A
value ● at AC-6a	
 up to 230 V for current peak value n=30 rated value 	105 A
 up to 400 V for current peak value n=30 rated value 	105 A
— up to 500 V for current peak value n=30 rated value	105 A
— up to 690 V for current peak value n=30 rated value	105 A
— up to 1000 V for current peak value n=30 rated value	65 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating	95 mm ²
cycles at AC-4 • at 400 V rated value	81 A
at 400 V rated value at 690 V rated value	65 A
operational current	
• at 1 current path at DC-1	
— 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
 with 2 current paths in series at DC-1 	
- mai = carroin patrio in correct at Do-1	

— 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
with 3 current paths in series at DC-1 — 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
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	160 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 	
— at 24 V rated value	160 A
— at 110 V rated value	160 A
— 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 160 A
— at 220 V rated value — at 440 V rated value	1.4 A
— at 600 V rated value	0.75 A
operating power	0.73 A
• at AC-3	
— at 230 V rated value	55 kW
— at 400 V rated value	90 kW
— at 500 V rated value	132 kW
— at 690 V rated value	160 kW
— at 1000 V rated value	90 kW
• at AC-3e	
— at 230 V rated value	55 kW
— at 400 V rated value	90 kW
— at 500 V rated value	132 kW
— at 690 V rated value	160 kW
— at 1000 V rated value	90 kW
operating power for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	45 kW
• at 690 V rated value	65 kW
operating apparent power at AC-6a	OO NVV
up to 230 V for current peak value n=20 rated value	60 000 kVA
• up to 400 V for current peak value n=20 rated value	100 000 VA
up to 500 V for current peak value n=20 rated value	130 000 VA
up to 690 V for current peak value n=20 rated value	180 000 VA
 up to 1000 V for current peak value n=20 rated 	110 000 VA
value	
operating apparent power at AC-6a	
up to 230 V for current peak value n=30 rated value	40 000 VA
up to 400 V for current peak value n=30 rated value	70 000 VA
• up to 500 V for current peak value n=30 rated value	90 000 VA
• up to 690 V for current peak value n=30 rated value	120 000 VA
up to 1000 V for current peak value n=30 rated value	110 000 VA
short-time withstand current in cold operating state	
up to 40 °C	
 limited to 1 s switching at zero current maximum 	2 900 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	2 084 A; Use minimum cross-section acc. to AC-1 rated value
limited to 10 s switching at zero current maximum	1 480 A; Use minimum cross-section acc. to AC-1 rated value
limited to 30 s switching at zero current maximum	968 A; Use minimum cross-section acc. to AC-1 rated value

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limited to 60 s switching at zero current maximum	801 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	0.000.4/L
• at AC	2 000 1/h
• at DC	2 000 1/h
operating frequency	000.4%
• at AC-1 maximum	800 1/h
• at AC-2 maximum	300 1/h
• at AC-3 maximum	750 1/h
• at AC-3e maximum	750 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	0.0
• 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
	0.8 1.1
• at 60 Hz	with varistor
design of the surge suppressor	with valistor
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	0.0
• at 50 Hz	0.9
• at 60 Hz	0.9
apparent holding power of magnet coil at AC	E O VA
• 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	5.2 VV
• at AC	20 95 ms
• at DC	20 95 ms
opening delay	25 55 1116
• 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	2
instantaneous contact	
number of NO contacts for auxiliary contacts instantaneous contact	2
operational current at AC-12 maximum	10 A
operational 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
operational current at DC-12	
at 24 V rated value	10 A
• at 48 V rated value	6 A
at 60 V rated value	6 A

• et 110 V rated value • at 120 V rated value • at 120 V rated value • at 220 V rated value • at 24 V rated value • at 24 V rated value • at 24 V rated value • at 36 V rated value • at 110 V rated value • at 120 V rated value • at 120 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 200 V rated value • at 40408 V rated value • at 200 V rated value • at 200 V rated value • at 40408 V rated value • at 200 V rated value • at 400 V rated value		3 A
A 220 V rated value		
• at 90 OV rated value operational current at DC-13 • at 24 V rated value • at 80 V rated value • at 80 V rated value • at 80 V rated value • at 81 V rated value • at 125 V rated value • at 125 V rated value • at 126 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 320 V rated value • at 600 V rated value • at 220230 V rated value • at 220230 V rated value • at 220230 V rated value • at 2600 V rated value • at 2600 V rated value • at 600 V rated value • for solution frounting dimensions mounting position fastening method • side by-side mounting • with side-by-side mounting • with side-by-side mounting • for solute by side mounting • for for wards • on mounting		
a 24 AV related value		
• at 24 V rated value		0.15 A
• at 80 V rated value	•	
e at 10 V rated value	at 24 V rated value	
a 11 10 V rated value	 at 48 V rated value 	2 A
e at 125 V rated value	 at 60 V rated value 	2 A
at 220 V rated value	at 110 V rated value	1 A
e at 600 V rated value contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) ULUSSA ratings full-load current (FLA) for 3-phase AC motor e at 400 V rated value 192 A yielded mechanical performance (hp) e for single-phase AC motor — at 230 V rated value 50 hp e for 3-phase AC motor — at 220 V rated value 60 hp e at 460 V rated value 75 hp e at 460 V rated value 75 hp e at 460 V rated value 75 hp e at 460 V rated value 90 hp e at 202030 V rated value 90 hp e at 460,480 V rated value 90 hp e at 460,480 V rated value 90 hp e or 375,600 V rated value 90 h	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 at 600 V rated value at 600 V rated value for single-phase AC motor at 220 v rated value at 50 b p at 460/480 V rated value at 50 b p at 50 b p contact rating of auxilliary contacts according to U. 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 coordination 1 required with type of assignment 2 required with type of assignment 2 required with type of assignment 2 required with type of sasignment 2 required with side-by-side mounting fastening method surface +2 2 5 ** Utlable to the front and back screw fixing surface +2 2 5 ** Utlable to the front and back screw fixing with side-by-side mounting forwards upwards upwards upwards of min and the side omm for grounded parts for grounded parts for grounded parts for main current circuit for main current ci	 at 600 V rated value 	0.1 A
Tull-oad current (FLA) for 3-phase AC motor at 480 V rated value 180 A 180 A 180 V rated value 180 V rated value 60 hp 180 V rated value 180 Np 180 N	contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value 180 A 180 A 180 A 180 OV rated value 192 A 193 A 194 A 195 A 196 A 195 A 1		
at 480 V rated value 180 A 192 A		
* at 600 V rated value 192 A		180 Δ
yielded mechanical performance [hp] • for single-phase AC motor — at 230 V rated value • for 3-phase AC motor — at 200/230 V rated value — at 200/230 V rated value — at 250/500 V rated value — at 4575/600 V rated value — at 4575/600 V rated value — at 4575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value — with type of coordination 1 required fastening method fastening method fastening method fastening method side-by-side mounting with side-by-side mounting • with side-by		
• for single-phase AC motor — at 230 V rated value • for 3-phase AC motor — at 200/209 V rated value — at 220/230 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 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 coordination 1 required — with type of assignment 2 required 9G: 355 A (690 V, 100 kA) 9G: 315 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 315 A (415 V, 50 kA) • for short-circuit protection of the auxiliary switch required Installation/mounting/ dimensions mounting position fastening method • side-by-side mounting fastening method • side-by-side mounting • with side-by-side mounting — forwards — upwards — downwards — downwards — 10 mm • of or grounded parts — forwards — at the side — ownwards — ownwards — 10 mm • for late side — forwards — ownwards — ownwards — 10 mm • for main current or lorcuit — for main current or lorcuit • for main current or lorcuit • for main current or lorcuit • for main current or lorcuit • for main current or lorcuit • for main current or lorcuit • for main current or lorcuit • for main current or lorcuit • for main current or lorcuit • for main current or lorcuit • for main current or lorcuit • for main current or lorcuit • for main current or lorcuit • for main current or lorcuit • for auxiliary and control circuit		192 A
al 230 V rated value for 3-phase AC motor al 200/208 V rated value al 4200/209 V rated value al 4200/209 V rated value al 460/480 V rated value al 460/480 V rated value al 460/480 V rated value al 4575/600 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 all 460 v required for short-circuit protection of the auxiliary switch required all 460 v required all 460 v required for short-circuit protection of the auxiliary switch required all 460 v required side-by-side mounting all 460 v required all 460 v require		
• for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 480/480 V rated value — at 475/680 V rated value — at 575/680 V rated value — at 675/680 V rated value — with type of coordination 1 required — with type of coordination 1 required — with type of assignment 2 required — with type of assignment 2 required — with type of assignment 2 required — of or short-circuit protection of the auxiliary switch required — of or short-circuit protection of the auxiliary switch required — of short-circuit protection of the auxiliary switch required — of short-circuit protection of the auxiliary switch required sold sold sold sold sold sold sold sol	3 1	00 h
- at 200/208 V rated value - at 220/230 V rated value - at 420/230 V rated value - at 420/230 V rated value - at 45/5600 V rated value - 200 hp - 2		30 np
- at 220/230 V rated value - at 4575/600 V rated value - at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit - with type of coordination 1 required - with type of coordination 1 required - with type of coordination 1 required - with type of assignment 2 required - with type of assignment 2 required - with type of coordination 1 required - for short-circuit protection of the auxiliary switch - for short-circuit protection of the auxiliary switch - equired - with type of assignment 2 required - with vertical mounting surface +/-90° rotatable, with vertical mounting - side-by-side mounting - yes - with vertical mounting surface +/-90° rotatable, with vertical mounting - side-by-side mounting - Yes - ye	•	201
- at 460/480 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 required Installation/ mounting/ dimensions mounting position fastening method • side-by-side mounting fastening method • side-by-side mounting + with type of a side mounting - with side-by-side mounting - with side-by-side mounting - forwards - upwards - upwards - at the side - downwards - upwards - to rivards - upwards - to rivards - upwards - to mm - to for grounded parts - forwards - at the side - downwards - to mm - downwards - to mm - for main current circuit - downwards - to mm - the side - to mm - to		·
- 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 coordination 1 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 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 screw-type terminals • for waxiliary and control circuit screw-type terminals • for waxiliary and control circuit screw-type terminals • for maxiliary and control circuit screw-type terminals		·
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 • 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: 315 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 315 A (415 V, 50 kA) • for short-circuit protection of the auxiliary switch required spacing with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing Yes - tiltable to the front and back screw fixing Yes - to mm - downwards - to mm - to mm - downwards - to mm - to mm - downwards - to mm - to	 — at 460/480 V rated value 	150 hp
Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required GS: 355 A (690 V, 100 kA) GS: 315 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 315 A (415 V, 50 kA) • for short-circuit protection of the auxiliary switch required GS: 315 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 315 A (415 V, 50 kA) • for short-circuit protection of the auxiliary switch required GS: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/-22.5° tiliable to the front and back screw fixing **steahing method surface +/-22.5° tiliable to the front and back screw fixing **estable by-side mounting Yes **height 172 mm **dopth 170 mm **equired spacing **e	 — at 575/600 V rated value 	·
design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of coordination 1 required — 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 required • for short-circuit protection • for short-circuit protection • for absolute the first and short 200 A (690 V, 100 kA), althication and size of the first and size of	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: 315 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 315 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 screw fixing • side-by-side mounting • side-by-side mounting • with side-by-side mounting • forwards — upwards — downwards — 10 mm • of or grounded parts — forwards — upwards — upwards — upwards — the side — downwards — 10 mm • for wards — at the side — downwards — 10 mm • for live parts — forwards — upwards — ownwards — 10 mm • for live parts — forwards — upwards — the side — downwards — the side — downwards — at the side — for norwards — to mm • for main side — forwards — at the side — formards — at the side — forwards — at the side — formards — at the side — formards — at the side — forwards — at the side — formards — at the side — connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • for auxiliary and control circuit • for auxiliary and control circuit	Short-circuit protection	
with type of coordination 1 required 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	design of the fuse link	
- with type of assignment 2 required of reshort-circuit protection of the auxiliary switch required of reshort-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/-22.5° tillable to the front and back screw fixing of side-by-side mounting of s	 for short-circuit protection of the main circuit 	
• 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 screw fixing • side-by-side mounting • side-by-side mounting • side-by-side mounting * required spacing • with side-by-side mounting • forwards — upwards — upwards — downwards — at the side • for grounded parts — forwards — at the side — downwards — at the side — downwards — at the side — downwards • for live parts — forwards — upwards — upwards — upwards — uth side — downwards — at the side — downwards — at the side — downwards — to mm • for live parts — forwards — upwards — upwards — upwards — upwards — to mm • for live parts — forwards — downwards — at the side — downwards — to mm • for main current circuit • for auxiliary and control circuit • connection bar screw-type terminals	 — with type of coordination 1 required 	gG: 355 A (690 V, 100 kA)
• for short-circuit protection of the auxiliary switch required installation/ mounting/ dimensions mounting position side-by-side mounting • side-by-side mounting height width depth required spacing • with side-by-side mounting - forwards - upwards - at the side - downwards - downwards - at the side - downwards - upwards - to mm - downwards - upwards -	 — with type of assignment 2 required 	gG: 315 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 315 A (415
Installation/ mounting/ dimensions mounting position with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing • side-by-side mounting height width 120 mm depth 170 mm required spacing • with side-by-side mounting - forwards - upwards - downwards - at the side • for grounded parts - forwards - upwards - upwards - upwards - the side • for grounded parts - forwards - upwards - upwards - upwards - the side - forwards - upwards - the side - forwards - upwards - downwards - the side - forwards - downwards - the side - for main current siccuit • for main current circuit • for main current circuit • for main current circuit • for auxiliary and control circuit • connection bar screw-type terminals		V, 50 kA)
mounting position mounting position mounting position with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing screw fixing ves height feight vidth depth required spacing with side-by-side mounting forwards upwards downwards for grounded parts forwards upwards upwards for grounded parts forwards upwards for grounded parts forwards upwards for live parts for live parts forwards upwards upwards for live parts forwards upwards upwards for live parts forwards upwards upwards upwards for live parts forwards upwards for live parts formands for live parts forwards upwards upwards upwards for main current circuit for auxiliary and control circuit screw-type terminals		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 screw fixing • side-by-side mounting • side-by-side mounting Yes height vidth 172 mm vidth depth 170 mm required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — upwards — upwards — upwards — odwnwards — odwnwards — of mm • for live parts — forwards — upwards — upwards — upwards — at the side — downwards — 10 mm • for live parts — forwards — upwards — upwards — upwards — upwards — upwards — the side — odwnwards — the side — odwnwards — of mixe parts — forwards — upwards — upwards — upwards — upwards — upwards — the side — odwnwards — the side — odwnwards — the mixe parts — formards — the mixe parts — formards — upwards — upwards — upwards — upwards — upwards — the side — connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit Connection bar • for auxiliary and control circuit	·	
fastening method screw fixing • side-by-side mounting height 172 mm width 120 mm depth 170 mm required spacing • with side-by-side mounting — forwards 20 mm — upwards 10 mm — at the side 0 mm — at the side 10 mm — at the side 10 mm • for live parts — forwards 10 mm — at the side 10 mm — at the side 10 mm — at the side 10 mm • for live parts — forwards 20 mm — upwards 10 mm — at the side 10 mm — at the side 10 mm • for live parts — forwards 20 mm — upwards 10 mm • for live parts — forwards 20 mm • for main current circuit Connection bar • for main current circuit Screw-type terminals	Installation/ mounting/ dimensions	
fastening method	mounting position	
side-by-side mounting height width		
height width depth 120 mm 120 mm required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — upwards — upwards — the side • for grounded parts — forwards — upwards — upwards — upwards — upwards — odownwards — at the side — the sid	-	
width depth 170 mm required spacing • with side-by-side mounting — forwards 20 mm — upwards 10 mm — at the side 0 mm • for grounded parts — forwards 20 mm — upwards 10 mm • for grounded parts — forwards 20 mm — upwards 10 mm — at the side 10 mm — at the side 10 mm — at the side 10 mm • for live parts — forwards 20 mm — upwards 10 mm • for live parts — forwards 20 mm — upwards 10 mm • for live parts — forwards 10 mm Connections/ Terminals type of electrical connection • for main current circuit Connection bar screw-type terminals	side-by-side mounting	
depth required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side — for grounded parts — forwards — upwards — at the side — upwards — at the side — downwards — to mm • for live parts — forwards — upwards — to mm — at the side — downwards — to mm Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit Connection bar screw-type terminals	height	172 mm
required spacing with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — upwards — at the side — downwards — at the side — of mm — at the side — of mm — of rown for live parts — forwards — upwards — upwards — upwards — 10 mm — of live parts — forwards — upwards — of mm — of ormaring to mm Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit Connection bar • for auxiliary and control circuit Screw-type terminals	3	
 with side-by-side mounting	_	120 mm
forwards 20 mm upwards 10 mm downwards 10 mm at the side 0 mm for grounded parts forwards 20 mm upwards 10 mm at the side 10 mm downwards 10 mm for live parts forwards 20 mm upwards 10 mm upwards 10 mm upwards 10 mm downwards 10 mm downwards 10 mm downwards 10 mm at the side 10 mm at the side 10 mm at the side 50 mm at t	width	
- upwards 10 mm - downwards 10 mm - at the side 0 mm • for grounded parts - forwards 20 mm - upwards 10 mm - at the side 10 mm - at the side 10 mm - downwards 10 mm • for live parts - forwards 20 mm - upwards 10 mm • for wards 10 mm - downwards 10 mm - upwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 10 mm - at the side 10 mm - at the side 10 mm Connections/ Terminals type of electrical connection • for main current circuit Connection bar • for auxiliary and control circuit screw-type terminals	width depth	
- downwards - at the side o for grounded parts - forwards - upwards - at the side 10 mm - at the side - upwards - upwards - at the side 10 mm - downwards 10 mm • for live parts - forwards - upwards - upwards - upwards - downwards 10 mm - at the side 10 mm Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit Connections/ terminals	width depth required spacing	
- at the side 0 mm • for grounded parts - forwards 20 mm - upwards 10 mm - at the side 10 mm - downwards 10 mm • for live parts - forwards 20 mm - upwards 10 mm - downwards 10 mm - at the side 10 mm Connections/ Terminals type of electrical connection • for main current circuit 5 connection bar • for auxiliary and control circuit 5 screw-type terminals	width depth required spacing • with side-by-side mounting	170 mm
 for grounded parts — forwards — upwards — at the side — downwards for live parts — forwards — upwards — upwards — upwards — at the side — at the side To mm — at the side To mm Connections/ Terminals type of electrical connection for main current circuit for auxiliary and control circuit screw-type terminals 	width depth required spacing • with side-by-side mounting — forwards	170 mm
 for grounded parts — forwards — upwards — at the side — downwards for live parts — forwards — upwards — upwards — upwards — at the side — at the side To mm — at the side To mm Connections/ Terminals type of electrical connection for main current circuit for auxiliary and control circuit screw-type terminals 	width depth required spacing • with side-by-side mounting — forwards — upwards	170 mm 20 mm 10 mm
- forwards 20 mm - upwards 10 mm - at the side 10 mm - downwards 10 mm • for live parts - forwards 20 mm - upwards 10 mm - upwards 10 mm - downwards 10 mm - at the side 10 mm Connections/ Terminals type of electrical connection • for main current circuit Connection bar • for auxiliary and control circuit screw-type terminals	width depth required spacing • with side-by-side mounting — forwards — upwards — downwards	170 mm 20 mm 10 mm 10 mm
 upwards at the side downwards for live parts forwards upwards upwards downwards at the side mm at the side mm Connections/ Terminals type of electrical connection for main current circuit for auxiliary and control circuit screw-type terminals 	width depth required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side	170 mm 20 mm 10 mm 10 mm
- at the side - downwards 10 mm • for live parts - forwards 20 mm - upwards 10 mm - downwards 10 mm - at the side 10 mm Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit 10 mm Connection bar screw-type terminals	width depth required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts	170 mm 20 mm 10 mm 10 mm 0 mm
 downwards for live parts forwards upwards downwards at the side type of electrical connection for main current circuit for auxiliary and control circuit 10 mm Connection bar connection bar screw-type terminals	width depth required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards	170 mm 20 mm 10 mm 10 mm 0 mm
 for live parts forwards upwards downwards at the side Connections/ Terminals for main current circuit for auxiliary and control circuit Connection bar for auxiliary and control circuit screw-type terminals 	width depth required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards	170 mm 20 mm 10 mm 10 mm 0 mm 20 mm 10 mm
 — forwards — upwards — downwards — at the side 10 mm — at the side 10 mm Connections/ Terminals type of electrical connection for main current circuit for auxiliary and control circuit Connection bar for auxiliary and control circuit screw-type terminals 	width depth required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — at the side • at the side • for grounded parts — forwards — upwards — at the side	170 mm 20 mm 10 mm 10 mm 0 mm 20 mm 10 mm 10 mm
 — upwards — downwards — at the side — at the side — the side	width depth required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — at the side — downwards — at the side — downwards	170 mm 20 mm 10 mm 10 mm 0 mm 20 mm 10 mm 10 mm
- downwards - at the side 10 mm Connections/ Terminals type of electrical connection ● for main current circuit For auxiliary and control circuit • for auxiliary and control circuit • for auxiliary and control circuit • for auxiliary and control circuit	width depth required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — at the side — downwards — at the side • for live parts	170 mm 20 mm 10 mm 10 mm 0 mm 20 mm 10 mm 10 mm 10 mm
— at the side 10 mm Connections/ Terminals type of electrical connection	width depth required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — at the side — downwards — at the side — forwards — at the side — forwards — at the side — forwards	170 mm 20 mm 10 mm 10 mm 0 mm 20 mm 10 mm 10 mm 10 mm 10 mm 10 mm
type of electrical connection of or main current circuit for auxiliary and control circuit Connection bar screw-type terminals	width depth required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — at the side — downwards — at the side — forwards — upwards — at the side — downwards • for live parts — forwards — upwards	170 mm 20 mm 10 mm 10 mm 0 mm 20 mm 10 mm 10 mm 10 mm 10 mm 10 mm
type of electrical connection • for main current circuit • for auxiliary and control circuit Connection bar screw-type terminals	width depth required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — at the side — downwards — at the side — downwards — at the side — downwards • for live parts — forwards — upwards — downwards — downwards — downwards — downwards	170 mm 20 mm 10 mm 10 mm 0 mm 20 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
 for main current circuit for auxiliary and control circuit Connection bar screw-type terminals 	width depth required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — at the side — downwards — at the side — downwards • for live parts — forwards — upwards — downwards • for live parts — forwards — upwards — at the side — downwards — at the side	170 mm 20 mm 10 mm 10 mm 0 mm 20 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
• for auxiliary and control circuit screw-type terminals	width depth required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — at the side — downwards • for live parts — forwards — upwards — at the side — downwards • for live parts — forwards — upwards — at the side — downwards — at the side	170 mm 20 mm 10 mm 10 mm 0 mm 20 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
	width depth required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — at the side — downwards • for live parts — forwards — upwards — at the side — downwards • for live parts — forwards — upwards — at the side — downwards — upwards — upwards — upwards — at the side Connections/ Terminals type of electrical connection	20 mm 10 mm 0 mm 0 mm 20 mm 10 mm
• at contactor for auxiliary contacts Screw-type terminals	width depth required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — at the side — downwards • for live parts — forwards — upwards • for live parts — forwards — upwards — at the side — downwards — at the side — downwards — upwards — at the side Connections/ Terminals type of electrical connection • for main current circuit	20 mm 10 mm 10 mm 0 mm 20 mm 10 mm
	width depth required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — at the side — downwards • for live parts — forwards — upwards — downwards • for live parts — forwards — upwards — at the side Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit	20 mm 10 mm 10 mm 0 mm 20 mm 10 mm

of magnet coil
 width of connection bar
 thickness of connection bar
 diameter of holes
 number of holes
 type of connectable conductor cross-sections
 at AWG cables for main contacts

connectable conductor cross-section for main

contacts

stranded

connectable conductor cross-section for auxiliary contacts

- solid or stranded
- finely stranded with core end processing

type of connectable conductor cross-sections

- for auxiliary contacts
 - solid
 - solid or stranded
 - finely stranded with core end processing
- at AWG cables for auxiliary contacts

AWG number as coded connectable conductor cross section

• for auxiliary contacts

Screw-type terminals

17 mm

3 mm

9 mm

1

4 ... 250 kcmil

25 ... 120 mm²

0.5 ... 4 mm²

0.5 ... 2.5 mm²

 $2x\ (0.5\ ...\ 1.5\ mm^2),\ 2x\ (0.75\ ...\ 2.5\ mm^2),\ max.\ 2x\ (0.75\ ...\ 4\ mm^2)$

2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²), max. 2x (0,75 ... 4 mm²)

 $2x (0.5 \dots 1.5 \text{ mm}^2), 2x (0.75 \dots 2.5 \text{ mm}^2)$

2x (20 ... 16), 2x (18 ... 14), 1x 12

18 ... 14

Safety related data

product function

• mirror contact according to IEC 60947-4-1

• positively driven operation according to IEC 60947-

5-1

B10 value with high demand rate according to SN 31920 protection class IP on the front according to IEC

touch protection on the front according to IEC 60529 suitability for use

• safety-related switching OFF

Yes

No

1 000 000

IP00; IP20 with box terminal/cover

finger-safe, for vertical contact from the front with box terminal/cover

Yes

Certificates/ approvals

General Product Approval



Confirmation





KC



EMC

Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates



Type Examination Certificate UK CA



Special Test Certificate

Type Test Certificates/Test Report

Test Certificates

Marine / Shipping

Miscellaneous











other

Railway

Further informatior

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=3RT1056-6AF36

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1056-6AF36

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT1056-6AF36

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

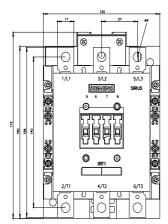
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1056-6AF36&lang=en

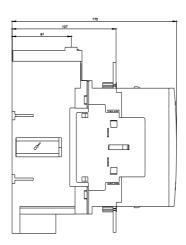
Characteristic: Tripping characteristics, I2t, Let-through current

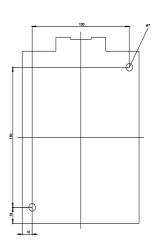
https://support.industry.siemens.com/cs/ww/en/ps/3RT1056-6AF36/char

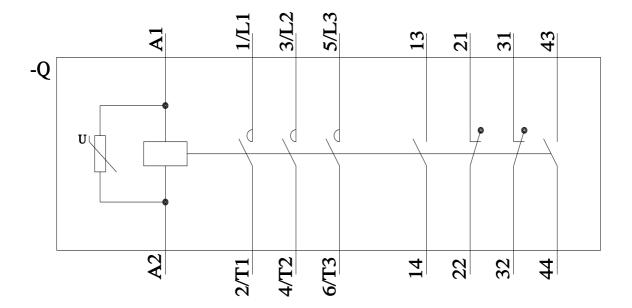
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1056-6AF36&objecttype=14&gridview=view1









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