SIEMENS

Data sheet 3RT2037-3NF30



Power contactor, AC-3 65 A, 30 kW / 400 V 1 NO + 1 NC, 84-155 V AC/DC with varistor 3-pole, size S2 Spring-type terminals

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S2
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 	11.4 W
 at AC in hot operating state per pole 	3.8 W
 without load current share typical 	2 W
insulation voltage	
 of main circuit with degree of pollution 3 rated value 	690 V
 of auxiliary circuit with degree of pollution 3 rated value 	690 V
surge voltage resistance	
 of main circuit rated value 	6 kV
of auxiliary circuit rated value	6 kV
maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at AC	7.7g / 5 ms, 4.5g / 10 ms
• at DC	7.7g / 5 ms, 4.5g / 10 ms
shock resistance with sine pulse	
• at AC	12g / 5 ms, 7g / 10 ms
• at DC	12g / 5 ms, 7g / 10 ms
mechanical service life (switching cycles)	
 of contactor typical 	10 000 000
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000
 of the contactor with added auxiliary switch block typical 	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2014
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 numidity minimum relative humidity at 55 °C according to IEC 60068-2-30	95 %
maximum	00 /0
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
at AC-3 rated value maximum	690 V
 at AC-3e rated value maximum 	690 V
operational current	
 at AC-1 at 400 V at ambient temperature 40 °C rated value at AC-1 	80 A
 — up to 690 V at ambient temperature 40 °C rated value — up to 690 V at ambient temperature 60 °C 	80 A 70 A
rated value	70 A
• at AC-3	05.4
— at 400 V rated value	65 A
— at 500 V rated value	65 A
— at 690 V rated value	47 A
• at AC-3e	05.4
— at 400 V rated value	65 A
— at 500 V rated value	65 A
— at 690 V rated value	47 A
at AC-4 at 400 V rated value	55 A
at AC-5a up to 690 V rated value	70.4 A
• at AC-5b up to 400 V rated value	53.9 A
 at AC-6a up to 230 V for current peak value n=20 rated value 	56.9 A
— up to 400 V for current peak value n=20 rated value	56.9 A
— up to 500 V for current peak value n=20 rated value	56.9 A
 up to 690 V for current peak value n=20 rated value 	47 A
• at AC-6a	
 up to 230 V for current peak value n=30 rated value 	38 A
— up to 400 V for current peak value n=30 rated value	38 A
— up to 500 V for current peak value n=30 rated value	38 A
— up to 690 V for current peak value n=30 rated value	38 A
minimum cross-section in main circuit at maximum AC-1 rated value	25 mm ²
operational current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	28 A
at 690 V rated value	22 A
operational current	
• at 1 current path at DC-1	
— at 24 V rated value	55 A
— at 110 V rated value	4.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.4 A
— at 600 V rated value	0.25 A
with 2 current paths in series at DC-1	
— at 24 V rated value	55 A
— at 110 V rated value	45 A
— at 220 V rated value	5 A

— at 440 V rated value	1 A
— at 600 V rated value	0.8 A
 with 3 current paths in series at DC-1 	
— at 24 V rated value	55 A
— at 110 V rated value	55 A
— at 220 V rated value	45 A
— at 440 V rated value	2.9 A
— at 600 V rated value	1.4 A
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	35 A
— at 110 V rated value	2.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.1 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	55 A
— at 110 V rated value	25 A
— at 220 V rated value	5 A
— at 440 V rated value	0.27 A
— at 600 V rated value	0.16 A
 with 3 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	55 A
— at 110 V rated value	55 A
— at 220 V rated value	25 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.35 A
operating power	
 at AC-2 at 400 V rated value 	30 kW
• at AC-3	
— at 230 V rated value	18.5 kW
— at 400 V rated value	30 kW
— at 500 V rated value	37 kW
— at 690 V rated value	37 kW
• at AC-3e	
— at 230 V rated value	18.5 kW
— at 400 V rated value	30 kW
— at 500 V rated value	37 kW
— at 690 V rated value	37 kW
operating power for approx. 200000 operating cycles	
at AC-4	
 at 400 V rated value 	14.7 kW
at 690 V rated value	20 kW
operating apparent power at AC-6a	
• up to 230 V for current peak value n=20 rated value	22.6 kVA
 up to 400 V for current peak value n=20 rated value 	39.4 kVA
• up to 500 V for current peak value n=20 rated value	49.2 kVA
• up to 690 V for current peak value n=20 rated value	56.1 kVA
operating apparent power at AC-6a	
• up to 230 V for current peak value n=30 rated value	15.1 kVA
• up to 400 V for current peak value n=30 rated value	26.2 kVA
• up to 500 V for current peak value n=30 rated value	32.8 kVA
• up to 690 V for current peak value n=30 rated value	45.3 kVA
short-time withstand current in cold operating state up to 40 $^{\circ}\text{C}$	
 limited to 1 s switching at zero current maximum 	1 055 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	730 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	520 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	336 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 60 s switching at zero current maximum 	272 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at AC	1 500 1/h

• at DC	1 500 1/h
operating frequency	1 000 1/11
at AC-1 maximum	800 1/h
at AC-1 maximum at AC-2 maximum	400 1/h
at AC-2 maximum at AC-3 maximum	700 1/h
at AC-3 maximum at AC-3e maximum	700 1/h
at AC-3e maximum at AC-4 maximum	200 1/h
	200 1/11
Control circuit/ Control	AOIDO
type of voltage of the control supply voltage	AC/DC
control supply voltage at AC	02 155 \/
at 50 Hz rated value at 60 Hz rated value	83 155 V
• at 60 Hz rated value	83 155 V
control supply voltage at DC	02 455 \/
• rated value	83 155 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
inrush current peak	1.5 A
duration of inrush current peak	50 μs
locked-rotor current mean value	0.45 A
locked-rotor current peak	0.8 A
duration of locked-rotor current	230 ms
holding current mean value	12 mA
apparent pick-up power of magnet coil at AC	
• at 50 Hz	40 VA
• at 60 Hz	40 VA
apparent holding power of magnet coil at AC	
• at 50 Hz	2 VA
• at 60 Hz	2 VA
closing power of magnet coil at DC	23 W
holding power of magnet coil at DC	1 W
closing delay	
• at AC	35 110 ms
• at DC	35 110 ms
opening delay	
• at AC	30 55 ms
• at DC	30 55 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	1
instantaneous contact	
number of NO contacts for auxiliary contacts instantaneous contact	1
operational current at AC-12 maximum	10 A
operational current at AC-15	
• at 230 V rated value	10 A
 at 400 V rated value 	3 A
 at 500 V rated value 	2 A
• at 690 V rated value	1 A
operational current at DC-12	
at 24 V rated value	10 A
• at 48 V rated value	6 A
at 60 V rated value	6 A
• at 110 V rated value	3 A

* at 125 V rated value		
a 1800 V rated value	at 125 V rated value	2 A
operational current at DC-13 all 24 V raided value 10 A all 60 V raided value 2 A all 60 V raided value 2 A all 60 V raided value 10 A all 125 V raided value 0.9 A all 126 V raided value 0.1 A all 126 V raided value 0.1 A all 600 V raided value 0.5 hp all 700 V raided value	 at 220 V rated value 	1 A
	at 600 V rated value	0.15 A
	operational current at DC-13	
■ at 10 V reted value ■ at 110 V reted value ■ at 1220 V reted value ■ at 220 V reted value ■ at 220 V reted value ■ at 800 V rete	 at 24 V rated value 	10 A
e st 110 V rated value	at 48 V rated value	2 A
• at 125 V rated value • at 220 V rated value • 0.1 A contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) U/UCSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 800 V rated value • or at 101/120 V rated value • or at 101/120 V rated value • or at 200/208 V rated value • at 200 V rated value • at 200/208 V rated value • at 200/208 V rated value • at 200/208 V rated value • at 480-480 V rated value • at 60-480 V rated value • or short-circuit protection • with type of assignment 2 required • or short-circuit protection of the auxiliary switch • or short-circuit pro	 at 60 V rated value 	2 A
e. at 220 V rated value	at 110 V rated value	1 A
e. at 220 V rated value	at 125 V rated value	0.9 A
• at 800 V rated value Contact reliability of auxillary contacts UUCSA retings full-load current (FLA) for 3-phase AC motor • at 800 V rated value • at 800 V rated value • of 800 V rated value • of 800 V rated value • of 100 V rated value • of 3-phase AC motor — at 1101/120 V rated value • of 3-phase AC motor — at 220/230 V rated value • of 3-phase AC motor — at 220/230 V rated value • of 3-phase AC motor — at 220/230 V rated value • of 3-phase AC motor — at 220/230 V rated value • of 100 pp — at 460/480 V rated value — at 1576600 V rated value — with type of contacts according to UL Short-circuit protection of the main circuit — with type of contaction 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 forward • for short-circuit protection of the auxiliary switch forward and backward by ± 2.25° on vertical mourting surface, can be tilled • side-by-side mounting • forwards • side-by-side mounting • forwards • of grounded parts — forwards — at the side • of or grounded parts — forwards — ownwards — at the side • ownwards • of rive parts — forwards — ownwards — ownwards • of rive parts — forwards — ownwards • of rive parts — forwards — ownwards — ow		
State Contact reliability of auxiliary contacts		
Section Comment Comm		
full-load current (FLA) for 3-phase AC motor • at 480 V rated value 65 A • at 480 V rated value 52 A yielded mechanical performance [http] • for single-phase AC motor — at 110/120 V rated value 10 hp • for single-phase AC motor — at 220/230 V rated value 20 hp — at 220/230 V rated value 50 hp — at 260/280 V vated value 50 hp — at 460/480 V rated value 50 hp — at 75/800 V rated value 50 hp — at 95/800 V rated value 50 hp — at 95/800 V rated value 50 hp — ontact rating of auxiliary contacts according to UL Short-circuit protection design of the fuse link 61 https://doi.org/10.000/10.00000/10.0000/10.0000/10.0000/10.0000/10.0000/10.0000/10.0000/10.0000/10.0000/10.0000/10.0000/10.00000/10.0000/10.0000/10.00000/10.0000/10.0000/10.0000/10.00000/10.00000/10.0000/10.00000/10.000		readity switching per 100 million (17 V, 1 mA)
• at 600 V rated value 52 A		05.4
vielded mechanical performance [hp] of or single-phase AC motor		
• for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor — at 220/230 V rated value — at 350/40 V rated value — at 55 hp — at 460/480 V rated value — at 575/600 V rated value — at 675/600 V rated value — at 60 v rate value — at 60 v rate value — with type of assignment 2 required — with type of assignment 2 required 4(415 V rate) — with type of assignment 2 required 4(415 V rate) 4(415 V		52 A
- at 110/120 V rated value - at 230 V rated value - 10 hp - 10	yielded mechanical performance [hp]	
■ at 230 V rated value ■ for 3-phase AC motor ■ at 200/230 V rated value ■ at 220/230 V rated value ■ at 220/230 V rated value ■ at 460/480 V rated value ■ at 475/600 V rated value ■ both p ■ at 475/600 V rated value ■ both p ■ 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 ■ 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 ■ side-by-side mounting/dimensions ■ hight ■ hight ■ forwards ■ side-by-side mounting ■ hight ■ idepth ■ 114 mm ■ width ■ 55 mm ■ depth ■ 130 mm ■ required spacing ■ with side-by-side mounting ■ of movards ■ of m	5 .	
• for 3-phase AC motor — at 200/209 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 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 • for short-circuit protection of the auxillary switch required • for short-circuit protection of the auxillary switch required installation/mounting/dimensions ### Company of the fuse link ##	 — at 110/120 V rated value 	5 hp
- at 200/208 V rated value - at 220/230 V rated value 20 hp - at 220/230 V rated value 50 hp - at 4575/600 V rated value 50 hp - at 575/600 V rated value 70 hp - at 575/600 V rated 70 hp - at 755/600 V rated 70 hp - at	— at 230 V rated value	10 hp
- at 220/230 V rated value - at 460/480 V rated value - at 575/600 V rated value - other fuse link - for short-circuit protection design of the fuse link - 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 - with type of assignment 2 required - for short-circuit protection of the auxiliary switch - for short-circuit protection of the auxiliary switch - for short-circuit protection of the auxiliary switch - side-by-side mounting dimensions - side-by-side mounting - forwards - upwards - upwards - at the side - for grounded parts - forwards - at the side - downwards - forwards - fo	• for 3-phase AC motor	
- at 220/230 V rated value - at 460/480 V rated value - at 575/600 V rated value - other fuse link - for short-circuit protection design of the fuse link - 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 - with type of assignment 2 required - for short-circuit protection of the auxiliary switch - for short-circuit protection of the auxiliary switch - for short-circuit protection of the auxiliary switch - side-by-side mounting dimensions - side-by-side mounting - forwards - upwards - upwards - at the side - for grounded parts - forwards - at the side - downwards - forwards - fo	— at 200/208 V rated value	20 hp
- at 460/480 V rated value 50 hp 50 hp 50 hp contact rating of auxillary contacts according to UL A600 / P600 Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit with type of assignment 2 required (415 V, 80 kA) (415 V, 80 kA	— at 220/230 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 • 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 • side-by-side mounting/ dimensions mounting position • /-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 Yes height 114 mm width depth • with side-by-side mounting • with side-by-side mounting • with side-by-side mounting • ownwards — downwards — at the side — downwards — at the side — downwards — to rowards — to rowards — upwards — to rowards — to rowards — at the side — downwards • for live parts — forwards — to wownwards — to mm • for upwards — to mm • for upwards — to mm — at the side — downwards — down		
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 • 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 Installation/ mounting/ dimensions mounting position **Frake in the forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface **side-by-side mounting** **bight** **inthe indepth** 114 mm width 55 mm depth **orwards and short and an according to DIN EN 60715 **side-by-side mounting • with side-by-side mounting - downwards — at the side — downwards — at the side — downwards • for grounded parts — forwards — at the side — downwards • for live parts — forwards — upwards — downwards — ownwards — own		
Short-circuit protection design of the fuse link		·
design of the fuse link		7,000 7 7 000
• 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 • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position • /-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 • side-by-side mounting • side-by-side mounting • side-by-side mounting • with side-by-side mounting • with side-by-side mounting • with side-by-side mounting • onwards — downwards — downwards — on mm • for grounded parts — forwards — upwards — at the side — downwards • for live parts — forwards — upwards — ownwards • for live parts — forwards — upwards — upwards — ownwards — forwards — upwards — forwards — ownwards		
- 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 - 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 such as the side of the state of t		
(415 V, 80 kA) gG: 125A (690V,100kA), aM: 63A (690V,100kA), BS88: 100A (415 V,80kA) • for short-circuit protection of the auxiliary switch required 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 scew and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 • side-by-side mounting • side-by-side mounting width #/-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 rail according to DIN EN 60715 • side-by-side mounting • width 45	•	O 050 A (000 V 400 LA)
• 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 fastening method • side-by-side mounting • side-by-side mounting height 114 mm width 55 mm depth required spacing • with side-by-side mounting — forwards — upwards — at the side • for grounded parts — upwards — upwards — upwards — torwards — upwards — torwards — torwards — upwards — torwards — torwards — to mm • for ilve parts — forwards — upwards — torwards — torwards — to mm • downwards • to mm • for live parts — forwards — upwards — upwards — downwards • to mm • for live parts — forwards — upwards — downwards • to mm • for live parts — forwards — upwards — downwards • to mm • downwards — to mm • for live parts — forwards — upwards — upwards — upwards — downwards • to mm • downwards — to mm • downwards — upwards — upwards — upwards — upwards — to mm		(415 V, 80 kA)
Installation/ mounting/ dimensions mounting position	 — with type of assignment 2 required 	
Installation/ mounting/ dimensions		gG: 10 A (500 V, 1 kA)
mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 • side-by-side mounting • side-by-side mounting Height 114 mm width 55 mm depth 130 mm required spacing • with side-by-side mounting — forwards — upwards — upwards — at the side • for grounded parts — forwards — upwards — upwards — to mm • for grounded parts — forwards — upwards — at the side — downwards — at the side — downwards — at the side — downwards — to mm • for live parts — forwards — upwards — downwards — upwards — downwards — downwards — downwards — downwards — downwards — downwards — upwards — downwards — at the side 6 mm	·	
fastening method screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 • side-by-side mounting Yes height 114 mm width 55 mm depth 130 mm required spacing • with side-by-side mounting — forwards — upwards — at the side • for grounded parts — forwards — upwards — at the side — downwards — at the side — downwards — of mm • for live parts — forwards — forwards — upwards — to mm — upwards — at the side — downwards — to mm • for live parts — forwards — upwards — upwards — upwards — to mm • for wards — downwards — to mm • for live parts — forwards — upwards — upwards — upwards — to mm — upwards — to mm — upwards — upwards — to mm — upwards — upwards — to mm — upwards — to mm — upwards — upwards — to mm — upwards — to mm — upwards — upwards — to mm — t		
e side-by-side mounting Yes height 114 mm width 55 mm depth 130 mm 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 — formards — upwards — at the side — downwards — to mm • for live parts — forwards — upwards — upwards — forwards — downwards — downwards — downwards — forwards — forwards — forwards — downwards — forwards — forwards — forwards — forwards — downwards — to mm — downwards — forwards		forward and backward by +/- 22.5° on vertical mounting surface
height 114 mm width 55 mm depth 130 mm required spacing 10 mm • with side-by-side mounting 10 mm — forwards 10 mm — upwards 10 mm — at the side 0 mm • for grounded parts 10 mm — forwards 10 mm — at the side 6 mm • for live parts 10 mm — forwards 10 mm — upwards 10 mm — downwards 10 mm — downwards 10 mm — at the side 6 mm	fastening method	
width 55 mm depth 130 mm required spacing 10 mm • with side-by-side mounting 10 mm — forwards 10 mm — upwards 10 mm — at the side 0 mm • for grounded parts 10 mm — upwards 10 mm — at the side 6 mm — downwards 10 mm • for live parts 10 mm — upwards 10 mm — downwards 10 mm — downwards 10 mm — at the side 6 mm	side-by-side mounting	Yes
depth 130 mm required spacing • with side-by-side mounting — forwards 10 mm — upwards 10 mm — downwards 10 mm — at the side 0 mm • for grounded parts 10 mm — upwards 10 mm — at the side 6 mm — downwards 10 mm • for live parts 10 mm — upwards 10 mm — downwards 10 mm — downwards 10 mm — at the side 6 mm	height	114 mm
required spacing	width	55 mm
 with side-by-side mounting — forwards — upwards — downwards — at the side o mm o for grounded parts — forwards — upwards — upwards — at the side — at the side — downwards for live parts — forwards — forwards — upwards — downwards — for live parts — forwards — upwards — downwards — downwards — at the side 6 mm 	depth	130 mm
— forwards 10 mm — upwards 10 mm — downwards 10 mm — at the side 0 mm • for grounded parts 10 mm — upwards 10 mm — at the side 6 mm — downwards 10 mm • for live parts 10 mm — upwards 10 mm — downwards 10 mm — downwards 10 mm — at the side 6 mm	required spacing	
— forwards 10 mm — upwards 10 mm — downwards 10 mm — at the side 0 mm • for grounded parts 10 mm — upwards 10 mm — at the side 6 mm — downwards 10 mm • for live parts 10 mm — upwards 10 mm — downwards 10 mm — downwards 10 mm — at the side 6 mm	 with side-by-side mounting 	
— upwards 10 mm — downwards 10 mm — at the side 0 mm • for grounded parts 10 mm — upwards 10 mm — at the side 6 mm — downwards 10 mm • for live parts 10 mm — upwards 10 mm — downwards 10 mm — downwards 10 mm — at the side 6 mm	,	10 mm
— downwards 10 mm — at the side 0 mm ● for grounded parts 10 mm — forwards 10 mm — upwards 6 mm — downwards 10 mm ● for live parts 10 mm — upwards 10 mm — downwards 10 mm — at the side 6 mm		
 — at the side ● for grounded parts — forwards — upwards — at the side — downwards ● for live parts — forwards — upwards — upwards — downwards — downwards — downwards — at the side — form — downwards — downwards — at the side — form — form — form — downwards — form — form	·	
 for grounded parts forwards upwards at the side downwards for live parts forwards upwards downwards mm upwards downwards mm downwards at the side 6 mm 		
— forwards 10 mm — upwards 10 mm — at the side 6 mm — downwards 10 mm • for live parts 10 mm — upwards 10 mm — downwards 10 mm — at the side 6 mm		
— upwards 10 mm — at the side 6 mm — downwards 10 mm • for live parts 10 mm — upwards 10 mm — downwards 10 mm — at the side 6 mm		10 mm
 — at the side — downwards • for live parts — forwards — upwards — downwards — downwards — at the side 6 mm 		
 — downwards ● for live parts — forwards — upwards — downwards — at the side 10 mm 10 mm 6 mm	·	
 for live parts forwards upwards downwards at the side 10 mm 10 mm 6 mm		
 forwards upwards downwards at the side 10 mm 10 mm mm 6 mm 		10 111111
 upwards downwards at the side 10 mm 6 mm 	•	
downwardsat the side6 mm		
— at the side 6 mm	•	
	— downwards	10 mm
Connections/ Terminals	— at the side	6 mm
	Connections/ Terminals	

type of electrical connection	
for main current circuit	screw-type terminals
 for auxiliary and control circuit 	spring-loaded terminals
 at contactor for auxiliary contacts 	Spring-type terminals
of magnet coil	Spring-type terminals
type of connectable conductor cross-sections	
for main contacts	
— solid or stranded	2x (1 35 mm²), 1x (1 50 mm²)
 finely stranded with core end processing 	2x (1 25 mm²), 1x (1 35 mm²)
at AWG cables for main contacts	2x (18 2), 1x (18 1)
connectable conductor cross-section for main	
contacts	
finely stranded with core end processing	1 35 mm²
connectable conductor cross-section for auxiliary	
contacts	0.5 0.52
solid or stranded finely stranded with care and pressering	0.5 2.5 mm ²
finely stranded with core end processing	0.5 1.5 mm ²
finely stranded without core end processing	0.5 2.5 mm²
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid or stranded	2x (0.5 2.5 mm²)
— finely stranded with core end processing	2x (0.5 1.5 mm²)
— finely stranded without core end processing	2x (0.5 2.5 mm²)
at AWG cables for auxiliary contacts	2x (20 14)
AWG number as coded connectable conductor cross section	
• for main contacts	18 1
 for auxiliary contacts 	20 14
Safety related data	
product function	
 mirror contact according to IEC 60947-4-1 	Yes
 positively driven operation according to IEC 60947- 	No
5-1	
B10 value with high demand rate according to SN 31920	1 000 000
proportion of dangerous failures	
 with low demand rate according to SN 31920 	40 %
with high demand rate according to SN 31920	73 %
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
T1 value for proof test interval or service life according to IEC 61508	20 y
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
suitability for use	
safety-related switching OFF	Yes
Certificates/ approvals	

General Product Approval



Confirmation





Miscellaneous

<u>KC</u>





Type Examination Certificate



Type Test Certificates/Test Report

Test Certificates

Marine / Shipping

Special Test Certificate











Marine / Shipping

other

Railway

Dangerous Good





Confirmation

Confirmation

Vibration and Shock

<u>Transport Information</u>

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=3RT2037-3NF30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2037-3NF30

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2037-3NF30

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2037-3NF30&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

 $\underline{https://support.industry.siemens.com/cs/ww/en/ps/3RT2037-3NF30/char}$

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2037-3NF30&objecttype=14&gridview=view1

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