# **SIEMENS**

Data sheet 3RT2037-1NP30



Power contactor, AC-3 65 A, 30 kW / 400 V 1 NO + 1 NC, 175-280 V AC/DC with varistor 3-pole, size S2 screw terminals

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
Seneral technical data	
size of contactor	S2
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>	11.4 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	3.8 W
<ul> <li>without load current share typical</li> </ul>	2 W
insulation voltage	
<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	690 V
<ul> <li>of auxiliary circuit with degree of pollution 3 rated value</li> </ul>	690 V
surge voltage resistance	
<ul> <li>of main circuit rated value</li> </ul>	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)	
<ul> <li>of contactor typical</li> </ul>	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 according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2014
mbient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
during operation	-25 +60 °C

relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30	95 %
maximum	33 /6
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
at AC-3e rated value maximum	690 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>	80 A
— up to 690 V at ambient temperature 40 $^{\circ}\text{C}$ rated value	80 A
— up to 690 V at ambient temperature 60 $^{\circ}\text{C}$ rated value	70 A
• at AC-3	
— at 400 V rated value	65 A
— at 500 V rated value	65 A
— at 690 V rated value	47 A
• at AC-3e	
— at 400 V rated value	65 A
— at 500 V rated value	65 A
— at 690 V rated value	47 A
<ul> <li>at AC-4 at 400 V rated value</li> </ul>	55 A
• at AC-5a up to 690 V rated value	70.4 A
<ul> <li>at AC-5b up to 400 V rated value</li> </ul>	53.9 A
<ul> <li>at AC-6a</li> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	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
<ul> <li>up to 690 V for current peak value n=20 rated value</li> </ul>	47 A
• at AC-6a	
<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	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  minimum cross-section in main circuit at maximum AC-1	38 A
rated value  operational current for approx. 200000 operating	20 111111
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
<ul><li>with 2 current paths in series at DC-1</li></ul>	
— 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
<ul> <li>with 3 current paths in series at DC-1</li> </ul>	
— 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	1A
	0.1 A
— at 440 V rated value	
— 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
<ul><li>with 3 current paths in series at DC-3 at DC-5</li></ul>	
— 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	OT RVV
— at 230 V rated value	18.5 kW
	30 kW
— at 400 V rated value	
— 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 400 V rated value     at 690 V rated value	20 kW
	ZU NVV
operating apparent power at AC-6a	22.6 kV/A
up to 230 V for current peak value n=20 rated value     up to 400 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	45.4104
• up to 230 V for current peak value n=30 rated value	15.1 kVA
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	26.2 kVA
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	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 °C	
<ul> <li>limited to 1 s switching at zero current maximum</li> </ul>	1 055 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	730 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 10 s switching at zero current maximum</li> </ul>	520 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 30 s switching at zero current maximum</li> </ul>	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
- 40710	. 000 ///

• 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 1111
Control circuit/ Control	ACIDO
type of voltage of the control supply voltage	AC/DC
control supply voltage at AC	175 290 V
• at 50 Hz rated value	175 280 V
at 60 Hz rated value	175 280 V
control supply voltage at DC	47E 290 V
• rated value	175 280 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	5 A
duration of inrush current peak	30 µs
locked-rotor current mean value	0.2 A
locked-rotor current peak	0.42 A
duration of locked-rotor current	230 ms
holding current mean value	6 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
<ul><li>at 400 V rated value</li></ul>	3 A
<ul> <li>at 500 V rated value</li> </ul>	2 A
• at 690 V rated value	1 A
operational current at DC-12	
<ul><li>at 24 V rated value</li></ul>	10 A
<ul><li>at 48 V rated value</li></ul>	6 A
<ul><li>at 60 V rated value</li></ul>	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   0.1 A     all 700 V raided value   0	<ul> <li>at 220 V rated value</li> </ul>	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	<ul> <li>at 24 V rated value</li> </ul>	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 • of 3-phase AC motor — at 200/208 V rated value • at 200/208 V rated value — at 200/208 V rated value — at 460/480 V rated value — at 460/480 V rated value — at 460/480 V rated value — at 60/480 V rated value — or short-circuit protection  design of the five link • for short-circuit protection of the main circuit — with type of assignment 2 required (aff. V. 80 kA) • or short-circuit protection of the auxiliary switch • or short-circuit protection  1	<ul> <li>at 60 V rated value</li> </ul>	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 rated value   50 hp     — at 460/480 V rated value   50 hp     — at 75/800 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	<b>5</b> .	
• 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  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 noto 35 mm standard mounting rail according to DIN EN 60715  Yes  height  #/ 114 mm  width #/ 55 mm  depth  required spacing  • with side-by-side mounting — of owards — upwards — odownwards — 10 mm — odownwards — 10 mm — of orwards — at the side — of oryounded parts — forwards — at the side — downwards — 10 mm  • of live parts — forwards — of live parts — forwards — odownwards — of mm — of mm — odownwards — odownwards — of mm — odownwards — of mm — odownwards — o	<ul> <li>— at 110/120 V rated value</li> </ul>	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 70 hp	— 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 ma  • for ilve parts  — forwards  — to ma  • for live parts  — forwards  — downwards  — downwards  — downwards  — downwards  — to mm  • for ilve parts  — forwards  — downwards  — downwards  — downwards  — downwards  — downwards  — downwards  — forwards  — downwards		
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**  **depth**  **orwards and short and		
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  — to mm  • for live parts  — forwards  — upwards  — to mm  • for live parts  — forwards  — upwards  — downwards  10 mm  • for live parts  — forwards  — upwards  — downwards  10 mm  • for live parts  — forwards  — upwards  — downwards  10 mm  • downwards  10 mm  • downwards  — to mm  • for live parts  — forwards  — upwards  — upwards  — upwards  — upwards  — to mm  • downwards  — to mm  • downwards  — at the side  • 6 mm		(415 V, 80 kA)
Installation/ mounting/ dimensions  mounting position	<ul> <li>— with type of assignment 2 required</li> </ul>	
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 — at the side  • for grounded parts — forwards — at the side — downwards — to mm  • for live parts — forwards — upwards — upwards — downwards — upwards — downwards — downwards — upwards — downwards — upwards — downwards — at the side — downwards — downwards — downwards — downwards — at the side — downwards — downwards — downwards — at the side	·	
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 —		
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
<ul> <li>with side-by-side mounting</li> <li>— forwards</li> <li>— upwards</li> <li>— downwards</li> <li>— at the side</li> <li>o mm</li> <li>o for grounded parts</li> <li>— forwards</li> <li>— upwards</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>— forwards</li> <li>— upwards</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> <li>6 mm</li> </ul>	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	<ul> <li>with side-by-side mounting</li> </ul>	
— 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		
<ul> <li>— at the side</li> <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>— downwards</li> <li>— downwards</li> <li>— at the side</li> <li>— form</li> <li>— downwards</li> <li>— downwards</li> <li>— at the side</li> <li>— form</li> <li>— form</li> <li>— form</li> <li>— downwards</li> <li>— form</li> <li>— form</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>downwards</li> <li>mm</li> <li>upwards</li> <li>downwards</li> <li>mm</li> <li>downwards</li> <li>at the side</li> <li>6 mm</li> </ul>		
— 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
<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> <li>6 mm</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> </ul> 10 mm 10 mm 6 mm	·	
<ul> <li>for live parts</li> <li>forwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> </ul> 10 mm 10 mm 6 mm		
<ul> <li>forwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> <li>10 mm</li> <li>10 mm</li> <li>mm</li> <li>6 mm</li> </ul>		10 111111
<ul> <li>upwards</li> <li>downwards</li> <li>at the side</li> <li>10 mm</li> <li>6 mm</li> </ul>	•	
<ul><li>downwards</li><li>at the side</li><li>6 mm</li></ul>		
— 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
<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	
• for main contacts	
<ul> <li>solid or stranded</li> </ul>	2x (1 35 mm²), 1x (1 50 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 25 mm²), 1x (1 35 mm²)
<ul> <li>at AWG cables for main contacts</li> </ul>	2x (18 2), 1x (18 1)
connectable conductor cross-section for main contacts	
<ul> <li>finely stranded with core end processing</li> </ul>	1 35 mm²
connectable conductor cross-section for auxiliary contacts	
<ul><li>solid or stranded</li></ul>	0.5 2.5 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>	
<ul><li>— solid or stranded</li></ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 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)
AWG number as coded connectable conductor cross section	
• for main contacts	18 1
<ul> <li>for auxiliary contacts</li> </ul>	20 14
Safety related data	
product function	
<ul> <li>mirror contact according to IEC 60947-4-1</li> </ul>	Yes
<ul> <li>positively driven operation according to IEC 60947- 5-1</li> </ul>	No
B10 value with high demand rate according to SN 31920	1 000 000
proportion of dangerous failures	
<ul> <li>with low demand rate according to SN 31920</li> </ul>	40 %
<ul> <li>with high demand rate according to SN 31920</li> </ul>	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	
<ul> <li>safety-related switching OFF</li> </ul>	Yes
Certificates/ approvals	

#### Certificates/ approvals

## **General Product Approval**



Confirmation





Miscellaneous



General Product Approval

**EMC** 

Functional Safety/Safety of Machinery

**Declaration of Conformity** 

**Test Certificates** 





Type Examination Certificate





Type Test Certificates/Test Report

**Test Certificates** 

### Marine / Shipping

Special Test Certific-<u>ate</u>











Marine / Shipping

other

Railway

**Dangerous Good** 





Confirmation

Confirmation

Vibration and Shock

Transport Information

## **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=3RT2037-1NP30

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT2037-1NP30}$ 

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2037-1NP30

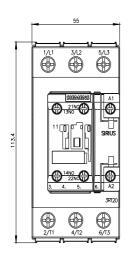
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

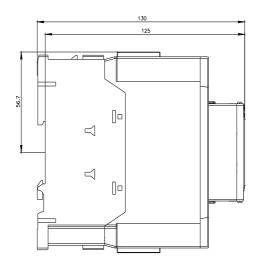
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2037-1NP30&lang=en

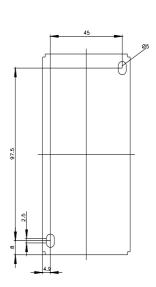
Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT2037-1NP30/char

Further characteristics (e.g. electrical endurance, switching frequency) <a href="http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2037-1NP30&objecttype=14&gridview=view1">http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2037-1NP30&objecttype=14&gridview=view1</a>







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