# **SIEMENS**

Data sheet 3RT2037-3NB30



Power contactor, AC-3 65 A, 30 kW / 400 V 1 NO + 1 NC, 20-33 V AC/DC 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	
<ul> <li>function module for communication</li> </ul>	No
auxiliary switch	Yes
power loss [W] for rated value of the current at AC in hot operating state	11.4 W
• per pole	3.8 W
power loss [W] for rated value of the current without load current share typical	2 W
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 acc. 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 acc. to IEC 81346-2	Q
Substance Prohibitance (Date)	01.10.2014 00:00:00
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature during operation	-25 +60 °C
ambient temperature during storage	-55 +80 °C
Main circuit	
number of poles for main current circuit	3

number of NO contacts for main contacts	3
operating voltage at AC-3 rated value maximum	690 V
operational current	
<ul> <li>at AC-1 at 400 V at ambient temperature 40 °C rated value</li> </ul>	80 A
• at AC-1	
<ul> <li>up to 690 V at ambient temperature 40 °C rated value</li> </ul>	80 A
<ul> <li>up to 690 V at ambient temperature 60 °C rated value</li> </ul>	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
<ul> <li>at AC-4 at 400 V rated value</li> </ul>	55 A
<ul> <li>at AC-5a up to 690 V rated value</li> </ul>	70.4 A
<ul> <li>at AC-5b up to 400 V rated value</li> </ul>	53.9 A
• at AC-6a	
<ul> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	56.9 A
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	56.9 A
<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	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	38 A
minimum cross-section in main circuit at maximum AC-1 rated value	25 mm <sup>2</sup>
operational current for approx. 200000 operating cycles at AC-4	
<ul><li>at 400 V rated value</li></ul>	28 A
at 690 V rated value	22 A
operational current	
<ul> <li>at 1 current path at DC-1</li> </ul>	
— 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
operational current	

- at 4 suggest not - + DO 0 - + DO 5	
• at 1 current path at DC-3 at DC-5	05 A
— 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
<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>	
— 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
operating power for approx. 200000 operating cycles at AC-4	
<ul> <li>at 400 V rated value</li> </ul>	14.7 kW
at 690 V rated value	20 kW
operating apparent power at AC-6a	
<ul> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	22.6 kV·A
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	39.4 kV·A
<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	49.2 kV·A
<ul> <li>up to 690 V for current peak value n=20 rated value</li> </ul>	56.1 kV·A
operating apparent power at AC-6a	
<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	15.1 kV·A
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	26.2 kV·A
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	32.8 kV·A
• up to 690 V for current peak value n=30 rated value	45.3 kV·A
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
<ul> <li>limited to 60 s switching at zero current maximum</li> </ul>	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	
• at AC-1 maximum	800 1/h
• at AC-2 maximum	400 1/h
• at AC-3 maximum	700 1/h
at AC-4 maximum	200 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	20 33 V
at 60 Hz rated value	20 33 V

control supply voltage at DC	
rated value	20 33 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	3 A
duration of inrush current peak	50 μs
locked-rotor current mean value	1A
locked-rotor current peak	2.6 A
duration of locked-rotor current	230 ms
holding current mean value	40 mA
apparent pick-up power of magnet coil at AC	10 11 11 11
• at 50 Hz	40 V·A
• at 60 Hz	40 V-A
apparent holding power of magnet coil at AC	
• at 50 Hz	2 V·A
• at 60 Hz	2 V·A
closing power of magnet coil at DC	23 W
holding power of magnet coil at DC	1 W
closing delay	1 VV
• at AC	45 70 ms
• at DC	45 60 ms
opening delay	40 00 III3
• at AC	35 55 ms
• at DC	35 55 ms
• at DC arcing time	35 55 ms 10 20 ms
at DC     arcing time     control version of the switch operating mechanism	35 55 ms
at DC     arcing time     control version of the switch operating mechanism     Auxiliary circuit     number of NC contacts for auxiliary contacts	35 55 ms 10 20 ms
at DC     arcing time     control version of the switch operating mechanism     Auxiliary circuit     number of NC contacts for auxiliary contacts instantaneous contact     number of NO contacts for auxiliary contacts	35 55 ms 10 20 ms Standard A1 - A2
at DC     arcing time     control version of the switch operating mechanism     Auxiliary circuit     number of NC contacts for auxiliary contacts instantaneous contact     number of NO contacts for auxiliary contacts instantaneous contact	35 55 ms 10 20 ms Standard A1 - A2
at DC     arcing time     control version of the switch operating mechanism     Auxiliary circuit     number of NC contacts for auxiliary contacts instantaneous contact     number of NO contacts for auxiliary contacts instantaneous contact     operational current at AC-12 maximum	35 55 ms 10 20 ms Standard A1 - A2
at DC     arcing time     control version of the switch operating mechanism     Auxiliary circuit     number of NC contacts for auxiliary contacts instantaneous contact     number of NO contacts for auxiliary contacts instantaneous contact     operational current at AC-12 maximum     operational current at AC-15	35 55 ms 10 20 ms Standard A1 - A2
at DC     arcing time     control version of the switch operating mechanism     Auxiliary circuit     number of NC contacts for auxiliary contacts instantaneous contact     number of NO contacts for auxiliary contacts instantaneous contact     operational current at AC-12 maximum     operational current at AC-15	35 55 ms 10 20 ms Standard A1 - A2  1 1 1 10 A
arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  at 230 V rated value  at 400 V rated value	35 55 ms 10 20 ms Standard A1 - A2  1 1 1 10 A 10 A 3 A
at DC arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum  operational current at AC-15  at 230 V rated value at 400 V rated value  at 500 V rated value	35 55 ms 10 20 ms Standard A1 - A2  1 1 1 10 A 10 A 3 A 2 A
at DC arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum  operational current at AC-15  at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value	35 55 ms 10 20 ms Standard A1 - A2  1 1 1 10 A 10 A 3 A
at DC arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value  operational current at DC-12	35 55 ms 10 20 ms Standard A1 - A2  1 1 10 A 10 A 3 A 2 A 1 A
at DC arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value operational current at DC-12 at 24 V rated value	35 55 ms 10 20 ms Standard A1 - A2  1 1 1 10 A 10 A 3 A 2 A 1 A
at DC arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum  operational current at AC-15  at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value operational current at DC-12 at 24 V rated value at 48 V rated value	35 55 ms 10 20 ms Standard A1 - A2  1 1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A
at DC arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum  operational current at AC-15  at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value operational current at DC-12 at 24 V rated value at 48 V rated value at 60 V rated value at 60 V rated value	35 55 ms 10 20 ms Standard A1 - A2  1 1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A
arcing time  control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  at 230 V rated value  at 400 V rated value  at 500 V rated value  at 690 V rated value  operational current at DC-12  at 24 V rated value  at 48 V rated value  at 48 V rated value  at 60 V rated value  at 60 V rated value  at 110 V rated value	35 55 ms 10 20 ms Standard A1 - A2  1 1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A
at DC arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value  operational current at DC-12  at 24 V rated value at 48 V rated value at 60 V rated value at 60 V rated value at 61 V rated value at 61 V rated value at 110 V rated value at 125 V rated value	35 55 ms 10 20 ms Standard A1 - A2  1 1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 3 A 2 A
at DC arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum  operational current at AC-15  at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value  at 690 V rated value  at 24 V rated value  at 48 V rated value  at 48 V rated value  at 110 V rated value  at 110 V rated value  at 125 V rated value  at 220 V rated value  at 220 V rated value	35 55 ms 10 20 ms Standard A1 - A2  1 1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A
at DC arcing time control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum  operational current at AC-15  at 230 V rated value at 500 V rated value at 690 V rated value at 690 V rated value  at 48 V rated value  at 48 V rated value  at 48 V rated value  at 110 V rated value  at 125 V rated value  at 220 V rated value  at 220 V rated value  at 600 V rated value	35 55 ms 10 20 ms Standard A1 - A2  1 1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 3 A 2 A
arcing time  control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum  operational current at AC-15  at 230 V rated value  at 400 V rated value  at 500 V rated value  at 690 V rated value  operational current at DC-12  at 24 V rated value  at 48 V rated value  at 48 V rated value  at 110 V rated value  at 125 V rated value  at 125 V rated value  at 220 V rated value  at 600 V rated value	35 55 ms 10 20 ms Standard A1 - A2  1 1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A
■ at DC     arcing time     control version of the switch operating mechanism     Auxiliary circuit     number of NC contacts for auxiliary contacts instantaneous contact     number of NO contacts for auxiliary contacts instantaneous contact     operational current at AC-12 maximum     operational current at AC-15     ■ at 230 V rated value     ■ at 400 V rated value     ■ at 690 V rated value     ■ at 690 V rated value     ■ at 48 V rated value     ■ at 48 V rated value     ■ at 110 V rated value     ■ at 125 V rated value     ■ at 220 V rated value     ■ at 220 V rated value     ■ at 600 V rated value     ■ at 600 V rated value     ■ at 24 V rated value     ■ at 220 V rated value     ● at 600 V rated value     ● at 600 V rated value     ● at 600 V rated value     operational current at DC-13     ● at 24 V rated value	35 55 ms 10 20 ms Standard A1 - A2  1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A
■ at DC     arcing time     control version of the switch operating mechanism     Auxiliary circuit     number of NC contacts for auxiliary contacts instantaneous contact     number of NO contacts for auxiliary contacts instantaneous contact     operational current at AC-12 maximum     operational current at AC-15     ■ at 230 V rated value     ■ at 400 V rated value     ■ at 690 V rated value     ■ at 690 V rated value     ■ at 24 V rated value     ■ at 48 V rated value     ■ at 110 V rated value     ■ at 125 V rated value     ■ at 220 V rated value     ■ at 600 V rated value     ■ at 600 V rated value     ■ at 24 V rated value     ■ at 600 V rated value     ■ at 24 V rated value	35 55 ms 10 20 ms Standard A1 - A2  1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A
● at DC arcing time control version of the switch operating mechanism Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum  operational current at AC-15  ● at 230 V rated value ● at 400 V rated value ● at 500 V rated value  ● at 690 V rated value  operational current at DC-12  ● at 24 V rated value  ● at 48 V rated value  ● at 110 V rated value  ● at 125 V rated value  ● at 220 V rated value  ● at 600 V rated value  operational current at DC-13  ■ at 24 V rated value  • at 600 V rated value	35 55 ms 10 20 ms Standard A1 - A2  1 1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A
■ at DC     arcing time     control version of the switch operating mechanism     Auxiliary circuit     number of NC contacts for auxiliary contacts instantaneous contact     number of NO contacts for auxiliary contacts instantaneous contact     operational current at AC-12 maximum     operational current at AC-15     ■ at 230 V rated value     ■ at 400 V rated value     ■ at 690 V rated value     ■ at 690 V rated value     ■ at 4 V rated value     ■ at 4 V rated value     ■ at 110 V rated value     ■ at 125 V rated value     ■ at 125 V rated value     ■ at 220 V rated value     ■ at 24 V rated value     ■ at 24 V rated value     ■ at 25 V rated value     ■ at 27 V rated value     ■ at 28 V rated value     ■ at 29 V rated value     ■ at 24 V rated value     ■ at 48 V rated value     ■ at 49 V rated value	35 55 ms 10 20 ms Standard A1 - A2  1 1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A
● at DC arcing time control version of the switch operating mechanism Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum  operational current at AC-15  ● at 230 V rated value ● at 400 V rated value ● at 500 V rated value  ● at 690 V rated value  operational current at DC-12  ● at 24 V rated value  ● at 48 V rated value  ● at 110 V rated value  ● at 125 V rated value  ● at 220 V rated value  ● at 600 V rated value  operational current at DC-13  ■ at 24 V rated value  • at 600 V rated value	35 55 ms 10 20 ms Standard A1 - A2  1 1 1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A

Table   Tabl	at 600 V rated value	0.1 A
### Stock of Control of Charles and C		
full-load current (FLA) for 3-phase AC motor  • at 480 V rated value • at 600 V rated value • at 600 V rated value • 10 For single-phase AC motor  — at 101/120 V rated value • 10 For single-phase AC motor — at 200/208 V rated value • 10 For single-phase AC motor — at 200/208 V rated value • 10 For single-phase AC motor — 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 575/600 V rated value — with type of coordination 1 required — with type of assignment 2 required — with type of assignment 2 required • for short-circuit protection of the main circuit — with type of coordination 1 required 4(15 V, 80 kA)  • 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  • side-by-side mounting  • vith side-by-side mounting  • forwards  — upwards  — on mm  • forwards  — upwards  — on mm  • forwards  — on mm  • of or grounded parts  — forwards  — upwards  — on mm  • forwards  — on mm  • forwards  — on mm  • of or grounded parts  — forwards  — upwards  — on mm  • for auxiliary contacts  • for maynet coil  • for auxiliary contacts  • for maynet coil  • for auxiliary and control circuit  • for auxiliary and control circuit  • for auxiliary and cont		riadity switching per 100 million (17 V, 1 mz)
* at 480 V rated value		
• at 800 V rated value   52 A		65 A
yelded mechanical performance (hp)  • for single-phase AC motor  — at 101/120 V rated value — at 230 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 460/480 V rated value — at 75/5000 V rated value — other for suniformatic value — with type of conditional or required — with type of coordination 1 required — with type of assignment 2 required — with type of assignment 2 required — of short-circuit protection of the auxiliary switch required — with type of assignment 2 required — for short-circuit protection of the auxiliary switch required — with type of assignment 2 required — for short-circuit protection of the auxiliary switch required — with type of assignment 2 required — for short-circuit protection of the auxiliary switch required — side-by-side mounting of the auxiliary switch  fastening method — side-by-side mounting — type of assignment 2 required — side-by-side mounting — type of assignment 2 required — type of short-circuit protection of the auxiliary switch — type of assignment 2 required — type of short-circuit and type type terminals — type of connectable conductor cross-sections — type of type terminals — type of type terminals — type		
• for single-phase AC motor — at 1101/20 Y rated value — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value — at 220/208 V rated value — at 220/208 V rated value — at 220/30 V rated value — at 420/408 V rated value — at 480/408 V rated value — at 480/408 V rated value — at 575/600 V rated value  Contact rating of auxiliary contacts according to UL  Short-circuit protection  design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required — with type of assignment 2 required — with type of assignment 2 required — for short-circuit protection of the auxiliary switch required  • for short-circuit protection of the auxiliary switch required  fastening method  fastening method  fastening method  socordination  fastening method  socordination  fastening method  socordination  fastening method  socordination  forward and backward by ++-22.6° on vertical mounting surface; can be tilted forward and backward by ++-22.6° on vertical mounting rail according to Dik EN 60715  Yes  height  114 mm  width  for firm of the switch shows a firm standard mounting rail according to Dik EN 60715  Yes  - forwards — upwards — forwards — upwards — of mm — of ownwards — at the side — ownwards — ownwards — of mm — ownwards		J2 A
- al 110120 Y rated value - at 230 V rated value - at 230 V rated value - at 230 V rated value - at 220 hp - at 2575000 V rated value - 20 hp - at 4575000 V rated value - 50 hp - at 4575000 V rated value - 50 hp - 4575000 V rated value - 50 hp -		
at 230 V rated value  • for 3-phase AC motor  at 200/208 V rated value at 2200/30 V rated value at 4200/30 V rated value at 4200/30 V rated value at 4200/30 V rated value at 575/600 V rated value at 575/600 V rated value at 575/600 V rated value		5 hn
• for 3-phase AC motor — at 200/208 V rated value — at 200/208 V rated value — at 460/480 V rated value — at 475/800 V rated value — at 575/800 V rated value — 50 hp  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 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 space of the switch of the auxiliary switch required space of the switch of		·
- at 200/208 V rated value		10 πρ
- at 220/230 V rated value - at 460/480 V rated value 50 hp	·	20 hp
- at 450/480 V rated value 50 hp 50		·
		·
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  fastening method  • side-by-side mounting  • with side-by-side mounting  — orwards — odwnwards — of the side — odwnwards — at the side — odwnwards • of live parts — forwards • for live parts — forwards • for live parts — forwards • for main current circuit • for main current circuit • of magnet coll  • of magnet coll  type of connectable conductor cross-sections • for main contacts  • for main contacts  • for gononteats  • for main contacts  • for main contacts  • for main contacts  • for gononteats • for main contacts  • for main contacts  • for gononteats • for main contacts		
Short-circuit protection		·
design of the fuse link     For short-circuit protection of the main circuit		A0007 F 000
• 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  Installation mounting/ dimensions  mounting position  fastening method  • side-by-side mounting  • side-by-side mounting  • side-by-side mounting  • with side-by-side mounting  • of main corrent circuit  — downwards — 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 - stallation/ mounting/ dimensions - wounting position - t+/180° rotation possible on vertical mounting surface; can be titled forward and backward by +/- 22.5° on vertical mounting surface - screw and snap-on mounting onto 35 mm standard mounting rail - according to DN EN 60715 - yes - leight - with side-by-side mounting - with side-by-side mounting - with side-by-side mounting - with side-by-side mounting - ownwards - upwards - downwards - at the side - for grounded parts - forwards - at the side - downwards - upwards - of norwards - of norwards - of norwards - upwards - of norwards - upwards - of mm - ownwards - own	C	
- with type of assignment 2 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 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  • with side-by-side mounting  • orwards  - upwards  - downwards  - at the side  • for grounded parts  - forwards  - upwards  - upwards  - upwards  - ownwards  - ownward		aG: 250 A (600 V 100 kA) aM: 160 A (600 V 100 kA) BS00: 200 A
- with type of assignment 2 required  • for short-circuit protection of the auxiliary switch • 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 4/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715  Yes  height  #/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by 4/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715  Yes  height  #/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by 4/- 22.5° on vertical mounting surface screw he forward and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715  Yes  height  #/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by 4/- 22.5° on vertical mounting surface; can be tilted forward and backward by 4/- 22.5° on vertical mounting surface; can be tilted forward and backward by 4/- 22.5° on vertical mounting surface; can be tilted forward and backward by 4/- 22.5° on vertical mounting surface; can be tilted forward and backward by 4/- 22.5° on vertical mounting surface; can be tilted forward and backward by 4/- 22.5° on vertical mounting surface; can be tilted forward and backward by 4/- 22.5° on vertical mounting surface; can be tilted forward and backward by 4/- 22.5° on vertical mounting surface; can be tilted forward and backward by 4/- 22.5° on vertical mounting surface; can be tilted forward and backward by 4/- 22.5° on vertical mounting surface screw for and snapshall and surface; can be tilted forward and backward by 4/- 22.5° on vertical mounting surface screwards and snapshall and sna	— with type of coordination in required	
• for short-circuit protection of the auxiliary switch required  Installation/mounting/dimensions  mounting position  fastening method  • side-by-side mounting  • 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  • of main current circuit  • for wards  • for wards  • of ownwards  • of or live parts  • for live parts  • for live parts  • for for live parts  • downwards  • of ownwards  • of or main current circuit  • for auxiliary and control circuit  • of or auxiliary and control circuit  • of or main contacts  • for main contacts	— with type of assignment 2 required	gG: 125A (690V,100kA), aM: 63A (690V,100kA), BS88: 100A
mounting position  #/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface serve and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715  **side-by-side mounting**  **height**  **h		
forward and backward by +/- 22.5" on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rall according to DIN EN 60715  **side-by-side mounting**  **height**  **height	Installation/ mounting/ dimensions	
according to DIN EN 60715  • side-by-side mounting  height  width  55 mm  depth  130 mm  required spacing  • with side-by-side mounting  — forwards — upwards — downwards — at the side  • for grounded parts — forwards — upwards — 10 mm  • for grounded parts — forwards — 10 mm  • for grounded parts — forwards — 10 mm  • for grounded parts — forwards — 10 mm  • for live parts — forwards — upwards — upwards — 10 mm  • for live parts — forwards — upwards — 10 mm  • for live parts — forwards — 10 mm  • for min current circuit  • for main current circuit • for auxiliary and control circuit • of magnet coil  type of connectable conductor cross-sections • for main contacts	mounting position	
height 114 mm  width 55 mm  depth 130 mm  required spacing  • with side-by-side mounting  — forwards 10 mm  — a upwards 10 mm  — at the side 0 mm  • for grounded parts  — forwards 10 mm  • for grounded parts 10 mm  • for grounded parts 10 mm  — at the side 0 mm  — at the side 0 mm  — at the side 6 mm  — downwards 10 mm  — at the side 6 mm  — downwards 10 mm  • for live parts 10 mm  • for live parts 10 mm  — towards 10 mm  • for wards 10 mm  — convards 10 mm  — convards 10 mm  — upwards 10 mm  — downwards 10 mm  — at the side 6 mm  Connections/ Terminals  type of electrical connection  • for main current circuit screw-type terminals • of magnet coil Spring-type terminals • of magnet coil Spring-type terminals • of magnet coil Spring-type terminals • for onnectable conductor cross-sections • for main contacts	fastening method	
width 55 mm  depth 130 mm  required spacing  • with side-by-side mounting  — forwards 10 mm  — upwards 10 mm  — downwards 0 mm  • for grounded parts  — forwards 10 mm  • for grounded parts  — forwards 10 mm  — upwards 10 mm  — upwards 10 mm  — upwards 10 mm  — of this side 6 mm  — downwards 10 mm  • for live parts  — forwards 10 mm  • for live parts  — forwards 10 mm  • for live parts  — forwards 10 mm  — upwards 10 mm  • for live parts  — forwards 10 mm  — odownwards 10 mm  — 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  • of magnet coil Spring-type terminals  type of connectable conductor cross-sections  • for main contacts	side-by-side mounting	Yes
depth 130 mm  required spacing  with side-by-side mounting — forwards 10 mm — downwards 10 mm — at the side 0 mm  for grounded parts — forwards 10 mm — upwards 10 mm — at the side 6 mm — upwards 10 mm — at the side 6 mm — downwards 10 mm — at the side 6 mm — downwards 10 mm  for live parts — forwards 10 mm  where the side 10 mm  for live parts — forwards 10 mm — upwards 10 mm — upwards 10 mm — upwards 10 mm — commands 10 mm — downwards 10 mm — of main current circuit screw-type terminals  type of electrical connection  for main current circuit spring-loaded terminals  of magnet coil spring-type terminals  type of connectable conductor cross-sections  for main contacts  for main contacts	height	114 mm
required spacing  with side-by-side mounting — forwards — upwards — downwards — at the side of regrounded parts — forwards — upwards — forwards — to mm  for grounded parts — forwards — upwards — at the side — downwards — 10 mm — at the side — downwards — 10 mm  for live parts — for rowards — upwards — to mm  for live parts — forwards — upwards — upwards — to mm  Connections/ Terminals  type of electrical connection  of or auxiliary and control circuit at contactor for auxiliary contacts of magnet coil  type of connectable conductor cross-sections of romain contacts	width	55 mm
with side-by-side mounting     — forwards     — upwards     — downwards     — at the side     o mm      for grounded parts     — forwards     — upwards     — upwards     — upwards     — upwards     — at the side     — downwards     — at the side     — downwards     — at the side     — downwards     of or live parts     — forwards     — upwards     — upwards     — upwards     — upwards     — upwards     — downwards     — of ormain current circuit     of or auxiliary and control circuit     of or auxiliary and contacts      of magnet coil  type of connectable conductor cross-sections     of or main contacts  for main contacts	· ·	130 mm
forwards 10 mm upwards 10 mm downwards 10 mm at the side 0 mm  for grounded parts forwards 10 mm upwards 10 mm upwards 10 mm at the side 6 mm downwards 10 mm for live parts for live parts forwards 10 mm upwards 10 mm upwards 10 mm upwards 10 mm upwards 10 mm downwards 10 mm downwards 10 mm at the side 6 mm   Connections/ Terminals  type of electrical connection for main current circuit spring-loaded terminals at contactor for auxiliary contacts Spring-type terminals of magnet coil  type of connectable conductor cross-sections for main contacts		
- upwards 10 mm - downwards 0 mm - at the side 0 mm  • for grounded parts - forwards 10 mm - upwards 10 mm - upwards 10 mm - at the side 6 mm - downwards 10 mm • for live parts - forwards 10 mm • for live parts - forwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 10 mm - for main current circuit screw-type terminals - for auxiliary and control circuit spring-loaded terminals • at contactor for auxiliary contacts • of magnet coil Spring-type terminals  • type of connectable conductor cross-sections • for main contacts	,	
- downwards		
- at the side 0 mm  • for grounded parts  - forwards 10 mm  - upwards 10 mm  - at the side 6 mm  - downwards 10 mm  • for live parts  - forwards 10 mm  - upwards 10 mm  - upwards 10 mm  - upwards 10 mm  - upwards 10 mm  - downwards 10 mm  - downwards 6 mm  Connections/ Terminals  type of electrical connection  • for auxiliary and control circuit spring-loaded terminals  • at contactor for auxiliary contacts  • of magnet coil Spring-type terminals  type of connectable conductor cross-sections  • for main contacts	•	
for grounded parts         — forwards         — upwards         — at the side         — downwards         — for live parts         — forwards         — upwards         — forwards         — forwards         — upwards         — upwards         — upwards         — upwards         — upwards         — at the side         — downwards         — at the side         — at the side  Connections/ Terminals  type of electrical connection         — for auxiliary and control circuit         — at contactor for auxiliary contacts         — of magnet coil  type of connectable conductor cross-sections         — for main contacts  For main contacts		
forwards 10 mm upwards 6 mm at the side 6 mm downwards 10 mm  • for live parts forwards 10 mm upwards 10 mm upwards 10 mm upwards 10 mm upwards 10 mm downwards 10 mm at the side 6 mm  Connections/ Terminals  type of electrical connection  • for main current circuit spring-loaded terminals • at contactor for auxiliary and control circuit spring-loaded terminals • of magnet coil spring-type terminals  type of connectable conductor cross-sections • for main contacts		0 mm
- upwards		
- at the side 6 mm - downwards 10 mm  • for live parts - forwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 10 mm - 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		
- downwards  • for live parts  - forwards  - upwards  - upwards  - downwards  - at the side  Connections/ Terminals  type of electrical connection  • for main current circuit  • for auxiliary and control circuit  • at contactor for auxiliary contacts  • for magnet coil  type of connectable conductor cross-sections  • for main contacts	·	
for live parts         — forwards         — upwards         — downwards         — at the side  Connections/ Terminals  type of electrical connection         • for main current circuit         • for auxiliary and control circuit         • at contactor for auxiliary contacts         • of magnet coil  type of connectable conductor cross-sections         • for main contacts  • for main contacts		
- forwards 10 mm - upwards 10 mm - downwards 10 mm - 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 • of magnet coil Spring-type terminals  type of connectable conductor cross-sections • for main contacts		10 mm
- upwards - downwards - at the side  Connections/ Terminals  type of electrical connection  • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil  type of connectable conductor cross-sections • for main contacts	•	40
- downwards - at the side  Connections/ Terminals  type of electrical connection  • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil  type of connectable conductor cross-sections • for main contacts		
— 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	•	
type of electrical connection  • for main current circuit  • for auxiliary and control circuit  • at contactor for auxiliary contacts  • of magnet coil  type of connectable conductor cross-sections  • for main contacts		
type of electrical connection  • for main current circuit  • for auxiliary and control circuit  • at contactor for auxiliary contacts  • of magnet coil  type of connectable conductor cross-sections  • for main contacts		6 mm
<ul> <li>for main current circuit</li> <li>for auxiliary and control circuit</li> <li>at contactor for auxiliary contacts</li> <li>of magnet coil</li> <li>Spring-type terminals</li> <li>Spring-type terminals</li> <li>for main contacts</li> </ul>		
<ul> <li>for auxiliary and control circuit</li> <li>at contactor for auxiliary contacts</li> <li>of magnet coil</li> <li>Spring-type terminals</li> <li>Spring-type terminals</li> <li>for main contacts</li> </ul>		
<ul> <li>at contactor for auxiliary contacts</li> <li>of magnet coil</li> <li>Spring-type terminals</li> <li>type of connectable conductor cross-sections</li> <li>for main contacts</li> </ul>		
• of magnet coil  type of connectable conductor cross-sections  • for main contacts  Spring-type terminals	-	
type of connectable conductor cross-sections  • for main contacts		
• for main contacts		Spring-type terminals
— solid or stranded 2x (1 35 mm²), 1x (1 50 mm²)		
	<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	
finely stranded with core end processing	1 35 mm²
connectable conductor cross-section for auxiliary contacts	
<ul> <li>solid or stranded</li> </ul>	0.5 2.5 mm <sup>2</sup>
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 1.5 mm²
finely stranded without core end processing	0.5 2.5 mm <sup>2</sup>
type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
<ul><li>— solid or stranded</li></ul>	2x (0.5 2.5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²)
<ul> <li>finely stranded without core end processing</li> </ul>	2x (0.5 2.5 mm²)
at AWG cables for auxiliary contacts	2x (20 14)
<ul> <li>AWG number as coded connectable conductor cross section for main contacts</li> </ul>	18 1
<ul> <li>AWG number as coded connectable conductor cross section for auxiliary contacts</li> </ul>	20 14
Safety related data	
B10 value with high demand rate acc. to SN 31920	1 000 000
proportion of dangerous failures	
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	40 %
with high demand rate acc. to SN 31920	73 %
failure rate [FIT] with low demand rate acc. to SN 31920	100 FIT
product function	
<ul> <li>mirror contact acc. to IEC 60947-4-1</li> </ul>	Yes
<ul> <li>positively driven operation acc. to IEC 60947-5-1</li> </ul>	No
T1 value for proof test interval or service life acc. to IEC 61508	20 y
protection class IP on the front acc. to IEC 60529	IP20
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front
suitability for use safety-related switching OFF	Yes
Certificates/ approvals	

### **General Product Approval**







**Miscellaneous** 

<u>KC</u>



**EMC Declaration of Conformity Test Certificates** Marine / Shipping



**Miscellaneous** 



Type Test Certificates/Test Report

Special Test Certificate



## Marine / Shipping













Confirmation

Confirmation

#### **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=3RT2037-3NB30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2037-3NB30

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2037-3NB30

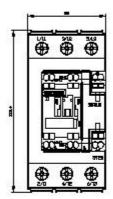
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

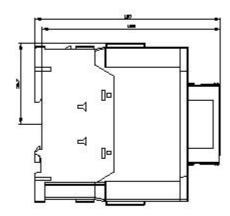
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2037-3NB30&lang=en

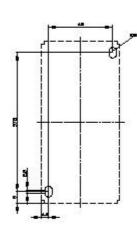
Characteristic: Tripping characteristics, I2t, Let-through current

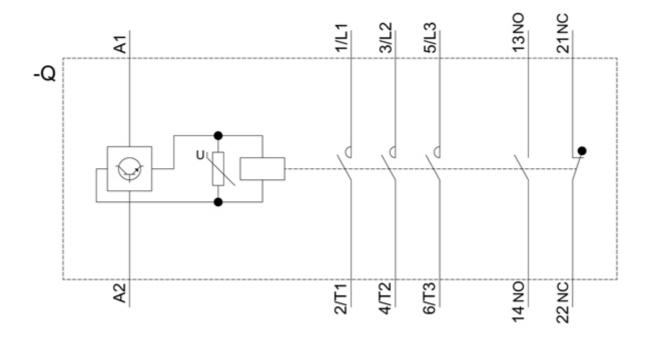
https://support.industry.siemens.com/cs/ww/en/ps/3RT2037-3NB30/char

Further characteristics (e.g. electrical endurance, switching frequency) <a href="http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2037-3NB30&objecttype=14&gridview=view1">http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2037-3NB30&objecttype=14&gridview=view1</a>









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