# **SIEMENS**

Data sheet 3RT2035-1NP30



power contactor, AC-3e/AC-3, 41 A, 18.5 kW / 400 V, 3-pole, 175-280 V AC/DC, 50/60 Hz, with integrated varistor, auxiliary contacts: 1 NO + 1 NC, screw terminal, size: S2

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	
<ul> <li>at AC in hot operating state</li> </ul>	6.6 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	2.2 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
• 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 protective separation 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 (operating 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
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +60 °C
during storage	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %

number of noise for main account singuit	2
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	2221
at AC-3 rated value maximum	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> </ul>	60 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated	60 A
value	
— up to 690 V at ambient temperature 60 °C rated	55 A
value	
• at AC-3	
— at 400 V rated value	41 A
— at 500 V rated value	41 A
— at 690 V rated value	24 A
• at AC-3e	
— at 400 V rated value	41 A
— at 500 V rated value	41 A
— at 690 V rated value	24 A
• at AC-4 at 400 V rated value	35 A
● at AC-5a up to 690 V rated value	52.8 A
<ul> <li>at AC-5b up to 400 V rated value</li> </ul>	33.2 A
• at AC-6a	
<ul> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	36.5 A
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	36.5 A
<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	36.5 A
<ul> <li>up to 690 V for current peak value n=20 rated value</li> </ul>	24 A
• at AC-6a	
<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	24.2 A
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	24.2 A
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	24.2 A
<ul> <li>up to 690 V for current peak value n=30 rated value</li> </ul>	24 A
minimum cross-section in main circuit at maximum AC-1 rated value	16 mm²
operational current for approx. 200000 operating cycles at AC-4	
at 400 V rated value	22 A
at 690 V rated value     at 690 V rated value	18.5 A
operational current	10.5 A
at 1 current path at DC-1	
— at 24 V rated value	55 A
— at 24 V rated value  — at 60 V rated value	23 A
— at 110 V rated value  — at 110 V rated value	4.5 A
— at 110 V rated value  — at 220 V rated value	4.5 A
	0.4 A
— at 440 V rated value	0.4 A 0.25 A
— at 600 V rated value	0.20 A
with 2 current paths in series at DC-1     at 24 V roted value.	55 A
— at 24 V rated value	55 A 45 A
— at 60 V rated value	
— at 110 V rated value	45 A
— at 220 V rated value	5 A
— at 440 V rated value	1A
— 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 60 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

<ul> <li>at 1 current path at DC-3 at DC-5</li> <li>at 24 V rated value</li> <li>at 60 V rated value</li> <li>at 220 V rated value</li> <li>at 440 V rated value</li> <li>at 600 V rated value</li> <li>with 2 current paths in series at DC-3 at DC-5</li> <li>at 24 V rated value</li> <li>at 60 V rated value</li> <li>at 60 V rated value</li> </ul>	
<ul> <li>— at 24 V rated value</li> <li>— at 60 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> <li>• with 2 current paths in series at DC-3 at DC-5</li> <li>— at 24 V rated value</li> </ul>	
<ul> <li>— at 60 V rated value</li> <li>— at 220 V rated value</li> <li>— at 440 V rated value</li> <li>— at 600 V rated value</li> <li>• with 2 current paths in series at DC-3 at DC-5</li> <li>— at 24 V rated value</li> <li>55 A</li> </ul>	
<ul> <li>at 220 V rated value</li> <li>at 440 V rated value</li> <li>at 600 V rated value</li> <li>with 2 current paths in series at DC-3 at DC-5</li> <li>at 24 V rated value</li> <li>55 A</li> </ul>	
<ul> <li>at 440 V rated value</li> <li>at 600 V rated value</li> <li>with 2 current paths in series at DC-3 at DC-5</li> <li>at 24 V rated value</li> <li>55 A</li> </ul>	
<ul> <li>— at 600 V rated value</li> <li>• with 2 current paths in series at DC-3 at DC-5</li> <li>— at 24 V rated value</li> <li>55 A</li> </ul>	
• with 2 current paths in series at DC-3 at DC-5  — at 24 V rated value 55 A	
— at 24 V rated value 55 A	A
— at 60 V rated value 45 A	
— at 110 V rated value 25 A	
— at 220 V rated value 5 A	
— at 440 V rated value 0.27 A	A
— at 600 V rated value 0.16 A	A
with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value 55 A	
— at 60 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	A
operating power	
• at AC-2 at 400 V rated value 18.5 k	<b>W</b>
• at AC-3	
— at 230 V rated value 11 kW	V
— at 400 V rated value 18.5 k	kW
— at 500 V rated value 22 kW	V
— at 690 V rated value 22 kW	V
• at AC-3e	
— at 230 V rated value 11 kW	V
— at 400 V rated value 18.5 k	kW
— at 500 V rated value 22 kW	V
— at 690 V rated value 22 kW	V
operating power for approx. 200000 operating cycles at AC-	
4	
• at 400 V rated value 11.6 k	
at 690 V rated value     16.8 k	(W
operating apparent power at AC-6a	
• up to 230 V for current peak value n=20 rated value 14.5 k	«VA
• up to 400 V for current peak value n=20 rated value 25.2 k	
• up to 500 V for current peak value n=20 rated value 31.6 k	
• up to 690 V for current peak value n=20 rated value 28.6 k	dVA
operating apparent power at AC-6a	
• up to 230 V for current peak value n=30 rated value 9.6 kV	
• up to 400 V for current peak value n=30 rated value 16.8 k	
• up to 500 V for current peak value n=30 rated value 21 kV	
• up to 690 V for current peak value n=30 rated value 28.6 k	dVA
short-time withstand current in cold operating state up to 40 °C	
• limited to 1 s switching at zero current maximum 843 A	x; Use minimum cross-section acc. to AC-1 rated value
• limited to 5 s switching at zero current maximum 596 A	x; Use minimum cross-section acc. to AC-1 rated value
• limited to 10 s switching at zero current maximum 400 A	x; Use minimum cross-section acc. to AC-1 rated value
• limited to 30 s switching at zero current maximum 241 A	x; Use minimum cross-section acc. to AC-1 rated value
• limited to 60 s switching at zero current maximum 196 A	x; 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 1 200	1/h
• at AC-2 maximum 750 1/	/h
• at AC-3 maximum 1 000	1/h

at AC-3e maximum	1 000 1/h
• at AC-4 maximum	300 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	175 280 V
at 60 Hz rated value	175 280 V
control supply voltage at DC	
• 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	22 44
• 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 instantaneous contact	1
number of NO contacts for auxiliary contacts instantaneous	1
contact	
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	2 A
• at 220 V rated value	1 A
• at 600 V rated value	0.15 A
operational current at DC-13	
at 24 V rated value	10 A
• at 48 V rated value	2 A

* at 50 V rated value		
a   125 V rated value		
a vis 200 V rised value		
4 1600 V rindo value	• at 125 V rated value	0.9 A
Contact reliability of auxiliary contacts		
Unit-load current (FLA) for 3-phase AC motor	at 600 V rated value	0.1 A
Tull-load current (FLA) for 3-phase AC motor  • at 480 Y rated value • at 600 Y rated value • at 600 Y rated value • at 600 Y rated value • at 200 208 V rated value • at 400 480 V rated value • at 400 480 V rated value • at 400 480 V rated value • at 575 690 V rated value • at 575 790 V rated value • at 575 79	contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
• at 880 V rated value	UL/CSA ratings	
• at 800 V rated value   41 Å	full-load current (FLA) for 3-phase AC motor	
yielded mechanical performance (hp)  • for single-phase AC motor  — at 120 V rated value — at 220 V rated value — at 2200,008 V rated value — at 2500,000 V rated value — at 2500,000 V rated value — at 575000 V rated value — with type of assignment 2 required — with type of ordination 1 required — with type of ordination 1 required • for short-circuit protection of the main circuit — 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 stellard from muniting during surface; can be titled forward and backward by +2-2.5" on vertical mounting surface; can be titled forward and backward by +2-2.5" on vertical mounting surface; can be titled forward and backward by +2-2.5" on vertical mounting surface; can be titled forward and backward by +2-2.5" on vertical mounting surface; can be titled forward and backward by +2-2.5" on vertical mounting surface; can be titled forward and backward by +2-2.5" on vertical mounting surface; can be titled forward and backward by +2-2.5" on vertical mounting surface; can be titled forward and backward by +2-2.5" on vertical mounting surface; can be titled forward and backward	at 480 V rated value	40 A
for single-phase AC motor	at 600 V rated value	41 A
	yielded mechanical performance [hp]	
- at 230 V rated value	<ul> <li>for single-phase AC motor</li> </ul>	
• for 3-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 575/800 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 96: 180 A (890 V, 100 kA), alt: 80 A (890 V, 100 kA), BS88: 125 A (415 V, 80 kA)  with type of assignment 2 required 96: 180 A (890 V, 100 kA), alt: 80 A (890 V, 100 kA), BS88: 125 A (415 V, 80 kA)  visit station mounting dimensions  mounting position  fastening method  side-by-side mounting 4**  **side-by-side mounting  - forwards - downwards - downwards - downwards - downwards - downwards - of the side - downwards - ownwards - own	— at 110/120 V rated value	3 hp
	— at 230 V rated value	7.5 hp
	<ul> <li>for 3-phase AC motor</li> </ul>	
- at 460480 V rated value - at 578/600 V rated value - 40 hp - at 578/600 V rated value - 40 hp - 40 h	— at 200/208 V rated value	10 hp
- 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  • 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  • 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 and control circuit  • for faulting variance can be titled forward and backward by 4/- 22.5° on vertical mounting surface; can be titled forward and backward by 4/- 22.5° on vertical mounting surface; can be titled forward and backward by 4/- 22.5° on vertical mounting surface; can be titled forward and backward by 4/- 22.5° on vertical mounting surface; can be titled forward and backward by 4/- 22.5° on vertical mounting surface; can be titled forward and backward by 4/- 22.5° on vertical mounting surface; can be titled forward and backward by 4/- 22	— at 220/230 V rated value	15 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 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 main circuit  • for switch specific protection of the sucklary switch required  g6: 160 (690V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 kA)  g6: 804 (690V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 kA)  g6: 804 (690V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 kA)  g6: 804 (690V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 kA)  g6: 804 (690V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 kA)  g6: 804 (690V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 kA)  g6: 804 (690V, 100 kA), aM: 80 A (690 V, 100 kA)	— at 460/480 V rated value	30 hp
Short-circuit protection   design of the fuse link	— at 575/600 V rated value	40 hp
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  • 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 switch substance in the auxiliary switch required  • for switch substance in the auxiliary switch required  • for switch substance in the suiface on vertical mounting surface, can be lilted forward and backward by 1/- 22.5' on vertical mounting surface.  • side-by-side mounting  • for symmetrical mounting surface, can be lilted forward and backward by 1/- 22.5' on vertical mounting surface, can be lilted forward and backward by 1/- 22.5' on vertical mounting surface, can be lilted forward and backward by 1/- 22.5' on vertical mounting surface, can be lilted forward and backward by 1/- 22.5' on vertical mounting surface, can be lilted forward and backward by 1/- 22.5' on vertical mounting surface, can be lilted forward and backward by 1/- 22.5' on vertical mounting surface, can be lilted forward and backward by 1/- 22.5' on vertical mounting surface, can be lilted forward and backward by 1/- 22.5' on vertical mounting surface, can be lilted forward and backward by 1/- 22.5' on vertical mounting surface, can be lilted forward and backward by 1/- 22.5' on vertical mounting surface, can be lilted forward and backward by 1/- 22.5' on vertical mounting surface, can be lilted forward and section	contact rating of auxiliary contacts according to UL	A600 / P600
For short-circuit protection of the main circuit	Short-circuit protection	
- with type of coordination 1 required - with type of assignment 2 required - with type of assignment 2 required - for short-circuit protection of the auxiliary switch required - for short-circuit protection of the auxiliary switch required - statilation/ mounting/ dimensions  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 DIN rail according to DIN EN 60715 - yes - side-by-side mounting - side-by-side mounting - with side-by-side mounting - with side-by-side mounting - of morards - upwards - downwards - downwards - of morards - upwards - of morards - upwards - of morards	design of the fuse link	
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 tilled forward and backward by #/- 22.5" on vertical mounting surface  screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715  * yes  height  #/-180" rotation possible on vertical mounting surface; can be tilled forward and backward by #/- 22.5" on vertical mounting surface  screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715  * yes  height  #/-180" rotation possible on vertical mounting surface; can be tilled forward and backward by #/- 22.5" on vertical mounting surface  screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715  * yes  height  #/-180" rotation possible on vertical mounting surface; can be tilled forward and backward by #/- 22.5" on vertical mounting surface; can be tilled forward and backward by #/- 22.5" on vertical mounting surface; can be tilled forward and backward by #/- 22.5" on vertical mounting surface; can be tilled forward and backward by #/- 22.5" on vertical mounting surface; can be tilled forward and backward by #/- 22.5" on vertical mounting surface; can be tilled forward and backward by #/- 22.5" on vertical mounting surface; can be tilled forward and backward by #/- 22.5" on vertical mounting surface; can be tilled forward and backward by #/- 22.5" on vertical mounting surface; can be tilled forward and backward by #/- 22.5" on vertical mounting surface; can be tilled forward and backward by #/- 22.5" on vertical mounting surface; can be tilled forward and backward by #/- 22.5" on vertical mounting surface; can be tilled forward and backward by #/- 22.5" on vertical mounting surface; can be tilled forward and surface; can be tilled forward and surface; can be tilled forward and surf	• for short-circuit protection of the main circuit	
• for short-circuit protection of the auxiliary switch required Instalation mounting climensions  mounting position  fastening method • side-by-side mounting • side-by-side mounting • side-by-side mounting • side-by-side mounting • with 114 mm width • side-by-side mounting • with side-by-side mounting • with side-by-side mounting • with side-by-side mounting • with side-by-side mounting • forwards • downwards • downwards • at the side • for grounded parts • forwards • at the side • downwards • at the side • downwards • for live parts • for live parts • for live parts • for live parts • for owards • for live parts • for main current circuit • for auxiliary and control circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil  type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing	<ul><li>— with type of coordination 1 required</li></ul>	
mounting position  #-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 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 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 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 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 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 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 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 surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted for suble according to DIN EN 60715  ### 14 mm  ##################################	— with type of assignment 2 required	gG: 80A (690V,100kA), aM: 50A (690V,100kA), BS88: 63A (415V,80kA)
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 DIN rail according to DIN EN 60715  **side-by-side mounting**  height 114 mm  width 55 mm  depth 130 mm  required spacing  • with side-by-side mounting  — forwards 10 mm  — at the side 0 mm  — or wards 10 mm  — at the side 6 mm  — at the side 6 mm  — downwards 10 mm  — at the side 6 mm  — ownwards 10 mm  — at the side 6 mm  — ownwards 10 mm  — at the side 6 mm  — ownwards 10 mm  — at the side 6 mm  — ownwards 10 mm  — to rowards 10 mm  — at the side 6 mm  — ownwards 10 mm  — for live parts  — forwards 10 mm  — ownwards 10 mm  — ownwards 10 mm  — for rowards 10 mm  — ownwards 10 mm  — for rowards 10 mm  — ownwards 10 mm  — ow	• for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)
fastening method	Installation/ mounting/ dimensions	
fastening method	mounting position	
e side-by-side mounting height hight width 55 mm depth 130 mm required spacing  • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — upwards — 10 mm — of rowards — of rowards — 10 mm — of rowards — 10 mm — of rowards — 10 mm — of rowards — upwards — 10 mm — of the side — downwards — 10 mm — of the side — downwards — 10 mm — of rive parts — forwards — lo mm — of rowards — upwards — of man — of rowards — of man — of rowards — of or an of rowards — of or an of rowards — of rowards — of or an of rowards — of rowards — of or auxiliary and control circuit • of or auxiliary and control circuit • of rowards • of magnet coil  type of connectable conductor cross-sections for main contacts • of oild or stranded • finely stranded with core end processing  2x (1 25 mm²), 1x (1 50 mm²)  2x (1 25 mm²), 1x (1 50 mm²)		
height width 55 mm  depth 130 mm  required spacing  • with side-by-side mounting  — forwards 10 mm — at the side 0 mm — at the side 6 mm — downwards 10 mm — at the side 6 mm — of orwards 10 mm — at the side 6 mm — ownwards 10 mm — at the side 6 mm — ownwards 10 mm — at the side 6 mm — ownwards 10 mm — at the side 6 mm — ownwards 10 mm — at the side 6 mm — ownwards 10 mm  • for live parts — forwards 10 mm  • for main current circuit 5 crew-type terminals  type of electrical connection • for main current circuit 5 crew-type terminals • of magnet coil 5 crew-type terminals  type of connectable conductor cross-sections for main contacts • ofinely stranded 2x (1 35 mm²), 1x (1 50 mm²) • finely stranded with core end processing 2x (1 25 mm²), 1x (1 50 mm²)	_	
width 55 mm  depth 130 mm  required spacing  • with side-by-side mounting  — forwards 10 mm  — upwards 10 mm  — downwards 10 mm  • for grounded parts  — forwards 10 mm  • for grounded parts  — forwards 10 mm  — at the side 6 mm  — upwards 10 mm  — at the side 6 mm  — downwards 10 mm  • for live parts  — forwards 10 mm  • for live parts  — forwards 10 mm  • for live parts  — for main current circuit screw-type terminals  • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing 2x (1 25 mm²), 1x (1 35 mm²)	side-by-side mounting	
depth  required spacing  with side-by-side mounting  forwards  upwards  downwards  at the side  for grounded parts  forwards  tonwards  ton mm  downwards  ton mm  downwards  ton mm  ton		
required spacing  with side-by-side mounting — forwards — upwards — downwards — at the side of ror grounded parts — forwards — of man current circuit of man and current circuit of man		
with side-by-side mounting     — forwards     — upwards     — downwards     — at the side     o mm      • for grounded parts     — forwards     — at the side     o mm      • for grounded parts     — forwards     — upwards     — upwards     — at the side     — downwards     — downwards     • for live parts     — forwards     — forwards     — to mm     — upwards     • for live parts     — forwards     — upwards     — to mm     — upwards     — forwards     — upwards     — for main current circuit     — 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     • solid or stranded     • finely stranded with core end processing     2x (1 35 mm²), 1x (1 35 mm²)     10 mm     3 mm     3 mm²     10 mm     3 mm     4 contactor for auxiliary contacts     • solid or stranded     4 connectable conductor cross-sections for main contacts     • solid or stranded     • finely stranded with core end processing	·	130 mm
forwards		
- upwards 10 mm - downwards 10 mm - at the side 0 mm  • for grounded parts - forwards 10 mm - at the side 6 mm - downwards 10 mm - at the side 6 mm - downwards 10 mm • for live parts - forwards 10 mm • for live parts - forwards 10 mm - downwards 10 mm - at the side 6 mm - downwards 10 mm - downwards 5 mm - at the side 6 mm   Connections/ Terminals  type of electrical connection • for auxiliary and control circuit screw-type terminals • at contactor for auxiliary contacts • of magnet coil Screw-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)	,	
- 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  • for live parts  - forwards 10 mm  - upwards 10 mm  - upwards 10 mm  - downwards 10 mm  - downwards 6 mm  - downwards 6 mm  - downwards 5 mm  - downwards 5 mm  - at the side 6 mm   Connections/ Terminals  type of electrical connection  • for main current circuit screw-type terminals  • at contactor for auxiliary and control circuit screw-type terminals  • at contactor for auxiliary contacts  • of magnet coil screw-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)	•	
for grounded parts         — forwards         — upwards         — at the side         — downwards         — downwards         — forive parts         — forwards         — upwards         — upwards         — upwards         — upwards         — upwards         — upwards         — downwards         — at the side         — downwards         — at the side         — formals   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         — solid or stranded         — solid or stranded         — finely stranded with core end processing  10 mm  10 mm  10 mm  20 mm		
- forwards 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 - upwards 10 mm - upwards 10 mm - at the side 6 mm  Connections/ Terminals  type of electrical connection • for main current circuit screw-type terminals • at contactor for auxiliary and control circuit screw-type terminals • at contactor for auxiliary contacts • of magnet coil screw-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)		U mm
- upwards		
- at the side - downwards 10 mm  • for live parts - forwards - upwards 10 mm - upwards 10 mm - at the side 6 mm  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 • solid or stranded • finely stranded with core end processing  6 mm  6 mm  Connections/ Terminals  5 crew-type terminals  5 crew-type terminals  5 crew-type terminals  6 crew-type terminals  7 crew-type terminals  8 crew-type terminals  9 crew-type terminals  10 mm  1		
- 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  • of magnet coil  type of connectable conductor cross-sections for main contacts  • solid or stranded  • finely stranded with core end processing  10 mm  1	•	
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         • solid or stranded         • finely stranded with core end processing  10 mm  10 mm  5 crew-type terminals  5 crew-type terminals  5 crew-type terminals  5 crew-type terminals  6 crew-type terminals  7 crew-type terminals  8 crew-type terminals  9 crew-type terminals  11 crew-type terminals  12 crew-type terminals  13 crew-type terminals  14 crew-type terminals  15 crew-type terminals  16 crew-type terminals  17 crew-type terminals  18 crew-type terminals  19 crew-type terminals  10 mm  20 crew-type terminals		
- 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 screw-type terminals • at contactor for auxiliary contacts Screw-type terminals • of magnet coil Screw-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)		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 • solid or stranded • finely stranded with core end processing  10 mm  10 mm  10 mm  12 crowled  13 crowled  14 screw-type terminals  15 screw-type terminals  16 screw-type terminals  17 screw-type terminals  18 crew-type terminals  20 crew-type terminals  20 crew-type terminals  20 crew-type terminals	·	
- 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  • solid or stranded  • finely stranded with core end processing  10 mm  6 mm  6 mm  Screw-type terminals  screw-type terminals  Screw-type terminals  2x (1 35 mm²), 1x (1 50 mm²)  2x (1 25 mm²), 1x (1 35 mm²)		
— at the side 6 mm  Connections/ Terminals  type of electrical connection	•	
type of electrical connection  • for main current circuit screw-type terminals  • for auxiliary and control circuit screw-type terminals  • at contactor for auxiliary contacts Screw-type terminals  • of magnet coil Screw-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)		
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  • solid or stranded  • finely stranded with core end processing  screw-type terminals  Screw-type terminals  Screw-type terminals  2x (1 35 mm²), 1x (1 50 mm²)  2x (1 25 mm²), 1x (1 35 mm²)		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>Screw-type terminals</li> <li>for main contacts</li> <li>for main contacts</li> <li>for magnet coil</li> <li>for main contacts</li> <li>for main contacts</li> <li>finely stranded with core end processing</li> <li>for main contacts</li> <li>finely stranded with core end processing</li> <li>for main contacts</li> <li>finely stranded with core end processing</li> <li>for main contacts</li> <li>finely stranded with core end processing</li> </ul>		
<ul> <li>for auxiliary and control circuit</li> <li>at contactor for auxiliary contacts</li> <li>of magnet coil</li> <li>Screw-type terminals</li> <li>type of connectable conductor cross-sections for main contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>2x (1 35 mm²), 1x (1 50 mm²)</li> <li>finely stranded with core end processing</li> </ul>		
<ul> <li>at contactor for auxiliary contacts</li> <li>of magnet coil</li> <li>Screw-type terminals</li> <li>type of connectable conductor cross-sections for main contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>2x (1 35 mm²), 1x (1 50 mm²)</li> <li>finely stranded with core end processing</li> <li>2x (1 25 mm²), 1x (1 35 mm²)</li> </ul>		
<ul> <li>◆ of magnet coil         Screw-type terminals     </li> <li>type of connectable conductor cross-sections for main contacts     </li> <li>◆ solid or stranded</li> <li>◆ finely stranded with core end processing</li> <li>2x (1 35 mm²), 1x (1 50 mm²)</li> <li>2x (1 25 mm²), 1x (1 35 mm²)</li> </ul>	•	•
type of connectable conductor cross-sections for main contacts  • solid or stranded  • finely stranded with core end processing  2x (1 35 mm²), 1x (1 50 mm²)  2x (1 25 mm²), 1x (1 35 mm²)	-	
<ul> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>2x (1 35 mm²), 1x (1 50 mm²)</li> <li>2x (1 25 mm²), 1x (1 35 mm²)</li> </ul>		Screw-type terminals
• finely stranded with core end processing 2x (1 25 mm²), 1x (1 35 mm²)	• •	
	solid or stranded	2x (1 35 mm²), 1x (1 50 mm²)
connectable conductor cross-section for main contacts	finely stranded with core end processing	2x (1 25 mm²), 1x (1 35 mm²)
	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>for AWG cables for auxiliary contacts</li> </ul>	2x (20 16), 2x (18 14)
AWG number as coded connectable conductor cross section	
<ul> <li>for main contacts</li> </ul>	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 a
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



<u>Miscellaneous</u>

<u>KC</u>

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 Certificate











Marine / Shipping

other

Railway

Dangerous Good





Confirmation

Confirmation

Vibration and Shock

Transport Information

Environment

#### **Further information**

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

### Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3RT2035-1NP30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2035-1NP30

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2035-1NP30

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

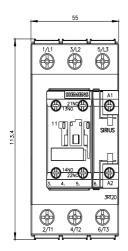
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2035-1NP30&lang=en

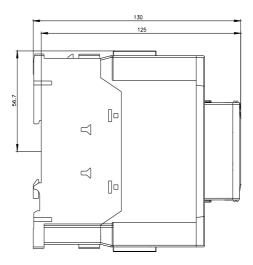
Characteristic: Tripping characteristics, I2t, Let-through current

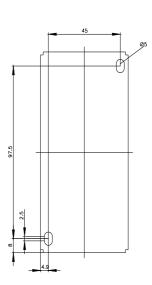
https://support.industry.siemens.com/cs/ww/en/ps/3RT2035-1NP30/char

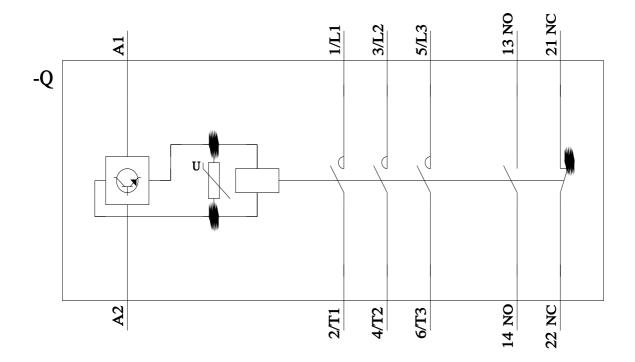
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2035-1NP30&objecttype=14&gridview=view1









last modified: 2/10/2023 🖸