# **SIEMENS**

Data sheet 3RT2036-1NB30



power contactor, AC-3e/AC-3, 51 A, 22 kW / 400 V, 3-pole, 20-33 V AC/DC, 50/60 Hz, with integrated varistor, auxiliary contacts: 1 NO + 1 NC, screw terminal

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
<ul> <li>auxiliary switch</li> </ul>	Yes
power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	12 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	4 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	
of main circuit rated value	6 kV
of auxiliary circuit rated value	6 kV
maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at AC	7.7g / 5 ms, 4.5g / 10 ms
• at DC	7.7g / 5 ms, 4.5g / 10 ms
shock resistance with sine pulse	
• at AC	12g / 5 ms, 7g / 10 ms
• at DC	12g / 5 ms, 7g / 10 ms
mechanical service life (operating cycles)	
of contactor typical	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	
during operation	-25 +60 °C
during storage	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %

Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
<ul> <li>at AC-3e rated value maximum</li> </ul>	690 V
operational current	
<ul> <li>at AC-1 at 400 V at ambient temperature 40 °C</li> </ul>	70 A
rated value	
• at AC-1	70.4
<ul> <li>up to 690 V at ambient temperature 40 °C rated value</li> </ul>	70 A
— up to 690 V at ambient temperature 60 °C	60 A
rated value	
• at AC-3	
— at 400 V rated value	51 A
— at 500 V rated value	51 A
— at 690 V rated value	24 A
• at AC-3e	
— at 400 V rated value	51 A
— at 500 V rated value	51 A
— at 690 V rated value	24 A
<ul> <li>at AC-4 at 400 V rated value</li> </ul>	41 A
<ul> <li>at AC-5a up to 690 V rated value</li> </ul>	61.6 A
<ul> <li>at AC-5b up to 400 V rated value</li> </ul>	41.5 A
• at AC-6a	
— up to 230 V for current peak value n=20 rated	43.2 A
value	40.0 A
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	43.2 A
— up to 500 V for current peak value n=20 rated	43.2 A
value	
<ul> <li>up to 690 V for current peak value n=20 rated</li> </ul>	24 A
value	
• at AC-6a	
— up to 230 V for current peak value n=30 rated	28.8 A
value	20.0.4
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	28.8 A
— up to 500 V for current peak value n=30 rated	28.8 A
value	20.071
<ul> <li>up to 690 V for current peak value n=30 rated</li> </ul>	24 A
value	
minimum cross-section in main circuit at maximum AC-1	25 mm²
rated value	
operational current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	24 A
at 690 V rated value     at 690 V rated value	20 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
	55 A 55 A

at 440 V rated value	20 4
— 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	0.F. A
— at 24 V rated value — at 220 V rated value	35 A 1 A
	0.1 A
<ul><li>— at 440 V rated value</li><li>— at 600 V rated value</li></ul>	0.06 A
• with 2 current paths in series at DC-3 at DC-5	0.00 A
— at 24 V rated value	55 A
— at 110 V rated value	25 A
— at 220 V rated value	5 A
— at 440 V rated value	0.27 A
— at 600 V rated value	0.16 A
• with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value	55 A
— at 110 V rated value	55 A
— at 220 V rated value	25 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.35 A
operating power	
at AC-2 at 400 V rated value	22 kW
• at AC-3	
— at 230 V rated value	15 kW
— at 400 V rated value	22 kW
<ul><li>— at 500 V rated value</li></ul>	30 kW
— at 690 V rated value	22 kW
• at AC-3e	
— at 400 V rated value	22 kW
— at 500 V rated value	30 kW
— at 690 V rated value	22 kW
operating power for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	12.6 kW
at 400 V rated value     at 690 V rated value	18.2 kW
operating apparent power at AC-6a	I O.Z IVVV
up to 230 V for current peak value n=20 rated value	17.2 kVA
• up to 400 V for current peak value n=20 rated value	29.9 kVA
• up to 500 V for current peak value n=20 rated value	37.4 kVA
• up to 690 V for current peak value n=20 rated value	28.6 kVA
operating apparent power at AC-6a	
up to 230 V for current peak value n=30 rated value	11.4 kVA
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	19.9 kVA
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	24.9 kVA
<ul> <li>up to 690 V for current peak value n=30 rated value</li> </ul>	28.6 kVA
short-time withstand current in cold operating state	
up to 40 °C	
limited to 1 s switching at zero current maximum	937 A; Use minimum cross-section acc. to AC-1 rated value
limited to 5 s switching at zero current maximum	697 A; Use minimum cross-section acc. to AC-1 rated value
limited to 10 s switching at zero current maximum	468 A; Use minimum cross-section acc. to AC-1 rated value
limited to 30 s switching at zero current maximum	282 A; Use minimum cross-section acc. to AC-1 rated value
Iimited to 60 s switching at zero current maximum  no load switching frequency.	229 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency  • at AC	1 500 1/h
• at DC	1 500 1/h
operating frequency	1 300 1/11
at AC-1 maximum	1 000 1/h
• at AC-2 maximum	600 1/h
• at AC-3 maximum	800 1/h
at AC-3e maximum	800 1/h
• at AC-4 maximum	250 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage at AC	10,00
• at 50 Hz rated value	20 33 V
at our imposition	

<ul> <li>at 60 Hz rated value</li> </ul>	20 33 V
control supply voltage at DC	
<ul> <li>rated value</li> </ul>	20 33 V
operating range factor control supply voltage rated value of magnet coil at DC	
<ul><li>initial value</li></ul>	0.8
<ul> <li>full-scale value</li> </ul>	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	1 A
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	
● 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 contact	1
operational current at AC-12 maximum	10 A
operational current at AC-15	
<ul> <li>at 230 V rated value</li> </ul>	10 A
<ul> <li>at 400 V rated value</li> </ul>	3 A
<ul> <li>at 500 V rated value</li> </ul>	2 A
<ul> <li>at 690 V rated value</li> </ul>	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
<ul> <li>at 110 V rated value</li> </ul>	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 60 V rated value	2 A
• at 110 V rated value	1 A
at 125 V rated value	0.9 A
• at 220 V rated value	0.3 A
at 600 V rated value	0.1 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	

* at 200 V rated value yielded mechanical performance (tp)  * for diagn-phase AC motor  — at 120 V rated value — at 220 V rated value — with 220 V rated value — with 220 V rated value — value value — with 220 V rated value — at 2	• at 480 V rated value	52 A
yelded mechanical performance [hz]  • for single-phase AC motor  • at 110 120 V rated value • for 5-phase AC motor  • at 200208 V rated value • at 220 V rated value • at 420 V rated value • at 420 V rated value • at 420 V rated value • at 575 600 V rated value • with type of coordination 1 required • for short-circuit protection of the main circuit • for short-circuit protection of the main circuit • for short-circuit protection of the auxiliary switch ges 70 A (590 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 k A) • for short-circuit protection of the auxiliary switch ges 70 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 k A) • for short-circuit protection of the auxiliary switch ges 70 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 k A)  • for short-circuit protection of the auxiliary switch ges 70 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 k A)  • for short-circuit protection of the auxiliary switch ges 70 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 k A)  • for 6 brot-circuit protection of the auxiliary switch ges 70 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 k A)  • for 800 F800   **Ges 140 F800 V 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 k A)  • for 800 F800 F800   **Ges 710 F800 F800  **Ges 7		
of single-phase AC motor		JZ A
at 230 V rated value - of 3 - 3 phase AC motor - at 200/280 V rated value - at 200/280 V rated value - at 200/280 V rated value - at 480/480 V rated value - at 480/480 V rated value - at 57500 V rated value - at 67500 V rated value value - at 67500 V rated value value - at 67500 V rated valu		O has
of 3-phase AC motor		·
at 200/208 V rated value		то пр
	•	451
at 460-480 V rated value at 575600 V rated value at 575600 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 condination 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 side-by-side mounting dimensions side-by-side mounting side-by-side mounting side-by-side mounting forwards at the side downwards at the side downwards downwards downwards downwards downwards downwards downwards forwards forwards downwards downwards downwards downwards downwards downwards forwards forwards forwards downwards downwards downwards downwards downwards forwards forwards forwards downwards downwards downwards downwards forwards for		
contact rating of auxillary contacts according to UL  Short-circuit protoction  design of the fuse link  • for short-circuit protection of the main circuit  — with type of conditation 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  • fact the short protection of the suntiliary switch required  • for swards  • for wards  • for wards  • for law base-by-side mounting  • for wards  • for wards  • for wards  • for wards  • for law base-by-side mounting  • for wards  • for law base-by-side mounting  • for wards  • for ward		,
Short-circuit protection   design of the fuse link   or short-circuit protection of the main circuit   — with type of coordination 1 required   Vi. 80 kA   680 V. 100 kA), amt. 80 A (680 V. 100 kA), BS88: 125 A (415 Vi. 80 kA)   General Coordination 1 required   Vi. 80 kA   General Coordination 2   General Co		50 hp
design of the fuse link     of or short-circuit protection of the main circuit	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 for short-accult protection of the auxiliary switch required for short-accult protection of the auxiliary switch required for short-accult protection of the auxiliary switch required	design of the fuse link	
with type of coordination 1 required with type of assignment 2 required for short-accult protection of the auxiliary switch required for short-accult protection of the auxiliary switch required for short-accult protection of the auxiliary switch required	for short-circuit protection of the main circuit	
- with type of assignment 2 required		gG: 160 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415
instaliation mounting dimensions  mounting position  fastening method  side-by-side mounting  with side-by-side mounting  - upwards - at the side - downwards - to riverads - at the side - downwards - at the side - downwards - to riverads - at the side - downwards - to riverads - to man - upwards -	,	
instaliation mounting dimensions  mounting position  fastening method  side-by-side mounting  with side-by-side mounting  - upwards - at the side - downwards - to riverads - at the side - downwards - at the side - downwards - to riverads - at the side - downwards - to riverads - to man - upwards -	<ul> <li>— with type of assignment 2 required</li> </ul>	gG: 80A (690V,100kA), aM: 50A (690V,100kA), BS88: 63A (415V,80kA)
required  mounting position  fastening method  side-by-side mounting height  width depth		
mounting position  fastening method  side-by-side mounting height width depth required spacing  with side-by-side mounting  forwards - upwards - of ownwards - of ownwards - of ownwards - at the side - downwards - ownwards - ownwards - at the side - downwards - ownwards - at the side - downwards - ownwards - at the side - downwards - for live parts - forwards - downwards - downwards - downwards - at the side - downwards - downwards - the side - downwards - at the side - downwards - at the side - downwards - at the side - downwards - downwards - at the side - for auxiliary and control circuit - of or auxiliary and control circuit - of magnet coil type of connectable conductor cross-section for main contacts - finely stranded with core end processing - at AWG cables for main contacts - finely stranded with core end processing - onnectable conductor cross-section for auxillary contacts - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - solid or stranded - solid or stranded - solid or stranded - solid		
mounting position  fastening method  side-by-side mounting height width depth required spacing  with side-by-side mounting  forwards - upwards - of ownwards - of ownwards - of ownwards - at the side - downwards - ownwards - ownwards - at the side - downwards - ownwards - at the side - downwards - ownwards - at the side - downwards - for live parts - forwards - downwards - downwards - downwards - at the side - downwards - downwards - the side - downwards - at the side - downwards - at the side - downwards - at the side - downwards - downwards - at the side - for auxiliary and control circuit - of or auxiliary and control circuit - of magnet coil type of connectable conductor cross-section for main contacts - finely stranded with core end processing - at AWG cables for main contacts - finely stranded with core end processing - onnectable conductor cross-section for auxillary contacts - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - solid or stranded - solid or stranded - solid or stranded - solid	Installation/ mounting/ dimensions	
fastening method science of the standard 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		+/-180° rotation possible on vertical mounting surface; can be tilted
### stending method  ### side-by-side mounting ### side-by-s		
side-by-side mounting height width depth required spacing  with side-by-side mounting  - forwards - upwards - downwards - at the side - for grounded parts - forwards - upwards - upwards - the side - downwards - upwards - 10 mm - on mm -	fastening method	
height width 55 mm 6 mm 7 mm 7 mm 7 mm 7 mm 7 mm 7 m	·	
width depth 130 mm 130	<ul> <li>side-by-side mounting</li> </ul>	Yes
depth required spacing  • with side-by-side mounting  — forwards — upwards — at the side — of more and the side — of main current circuit — of or and incurrent circuit — of main current circuit — of magnet coil  type of connectable conductor cross-sections — of magnet coil  type of connectable conductor cross-sections — solid or stranded — finely stranded with core end processing — at AWG cables for main contacts — solid or stranded — finely stranded with core end processing connectable conductor cross-section for main contacts — finely stranded with core end processing connectable conductor cross-section for main contacts — solid or stranded — finely stranded with core end processing connectable conductor cross-section for auxiliary contacts — solid or stranded — finely stranded with core end processing connectable conductor cross-section for auxiliary contacts — solid or stranded — finely stranded with core end processing connectable conductor cross-section for auxiliary contacts — solid or stranded — finely stranded with core end processing finely	height	114 mm
required spacing  • with side-by-side mounting  — forwards — upwards — downwards — at the side — for grounded parts — forwards — upwards — upwards — to mm  • for grounded parts — forwards — upwards — upwards — upwards — the side — downwards — at the side — downwards — for live parts — forwards — forwards — upwards — forwards — upwards — forwards — upwards — the side — downwards — upwards — the side — ownwards — upwards — the side — ownwards — ownw	width	55 mm
required spacing  • with side-by-side mounting  — forwards — upwards — downwards — at the side — for grounded parts — forwards — upwards — upwards — to mm  • for grounded parts — forwards — upwards — upwards — upwards — the side — downwards — at the side — downwards — for live parts — forwards — forwards — upwards — forwards — upwards — forwards — upwards — the side — downwards — upwards — the side — ownwards — upwards — the side — ownwards — ownw	depth	130 mm
with side-by-side mounting  forwards  upwards  downwards  downwards  for grounded parts  forwards  upwards  for grounded parts  forwards  upwards  downwards  for live parts  for live parts  for live parts  downwards  downwards  for main current circuit  for for auxiliary and control circuit  for main current circuit  for main c	•	100 11111
- forwards		
- upwards - downwards - at the side • for grounded parts - forwards - upwards - upwards - upwards - the side - downwards - upwards - downwards - for live parts - forwards - upwards - for inve parts - forwards - upwards - downwards - upwards - downwards - upwards - downwards - the side - downwards - at the side - for auxiliary and control circuit • for auxiliary and control circuit • at contactor for auxiliary contacts - solid or stranded - finely stranded with core end processing • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing	,	10 mm
- downwards - at the side  • for grounded parts  - forwards - upwards - at the side  • for main contacts - forwards - at the side - downwards - at the side - downwards - downwards - for live parts - forwards - upwards - forwards - upwards - upwards - downwards - at the side - downwards - at the side - formain current circuit - for auxiliary and control circuit - at contactor for auxiliary contacts - solid or stranded - finely stranded with core end processing		
- at the side  • for grounded parts  - forwards  - upwards  - at the side  - downwards  • for live parts  - forwards  - upwards  - forwards  - towards  - upwards  - downwards  10 mm  - upwards  - upwards  - upwards  - downwards  - at the side  - formain current circuit  • for auxiliary and control circuit  • at contactor for auxiliary contacts  • for main contacts  - solid or stranded  - finely stranded with core end processing  • sinely stranded  • finely stranded with core end processing  • solid or stranded  • finely stranded with core end processing  • solid or stranded  • finely stranded with core end processing  • solid or stranded  • finely stranded with core end processing  • solid or stranded  • finely stranded with core end processing  • solid or stranded  • finely stranded with core end processing  • solid or stranded  • finely stranded with core end processing  • solid or stranded  • finely stranded with core end processing  • solid or stranded  • finely stranded with core end processing  • solid or stranded  • finely stranded with core end processing  • solid or stranded  • finely stranded with core end processing  • solid or stranded  • finely stranded with core end processing  • solid or stranded  • finely stranded with core end processing  • solid or stranded  • finely stranded with core end processing  • solid or stranded  • finely stranded with core end processing  • solid or stranded  • finely stranded with core end processing  • solid or stranded  • finely stranded with core end processing	·	
• for grounded parts  — forwards — upwards — at the side — downwards 10 mm  • for live parts — forwards — upwards — upwards — upwards — upwards — downwards — downwards — at the side — downwards — at the side — forwards — at the side — forwards — at the side — formals   **Connections/ Terminals  **Type of electrical connection • 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 connectable conductor cross-section for main contacts • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing		
forwards		0 mm
- upwards		
- at the side	— forwards	
<ul> <li>downwards</li> <li>for live parts</li> <li>forwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> <li>for main current circuit</li> <li>for auxiliary and control circuit</li> <li>at contactor for auxiliary contacts</li> <li>for main contacts</li> <li>a screw-type terminals</li> <li>2x (1 35 mm²), 1x (1 50 mm²)</li> <li>at AWG cables for main contacts</li> <li>at AWG cables for main contacts</li> <li>at AWG cables conductor cross-section for main contacts</li> <li>at AWG cables conductor cross-section for main contacts</li> <li>at AWG cables for main contacts</li> <li>at AWG cables for main contacts</li> <li>sonnectable conductor cross-section for main contacts</li> <li>sinely stranded with core end processing</li> <li>at AWG cables for main contacts</li> <li>sonnectable conductor cross-section for main contacts</li> <li>solid or stranded</li> <li>solid or stranded with core end processing</li> <li>at AWG cables for main contacts</li> <li>solid or stranded with core end processing</li> <li>solid or stranded</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>solid or stranded</li> <li>solid or strand</li></ul>	— upwards	10 mm
<ul> <li>for live parts <ul> <li>forwards</li> <li>pwards</li> <li>pwards</li> <li>mm</li> <li>downwards</li> <li>mt he side</li> <li>6 mm</li> </ul> </li> <li>Connections/ Terminals <ul> <li>type of electrical connection</li> <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>type of connectable conductor cross-sections</li> <li>for main contacts</li> <li>a screw-type terminals</li> <li>Screw-type terminals</li></ul></li></ul>	— at the side	6 mm
forwards	— downwards	10 mm
- upwards - downwards - 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 connectable conductor cross-section for main contacts  • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts  • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing	<ul> <li>for live parts</li> </ul>	
- 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 • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts  • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing	— forwards	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 Screw-type terminals  • of magnet coil Screw-type terminals  type of connectable conductor cross-sections  • for main contacts  — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts  • finely stranded with core end processing connectable conductor cross-section for main contacts  • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts  • solid or stranded • finely stranded with core end processing	— upwards	10 mm
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 connectable conductor cross-section for main contacts  • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts  • solid or stranded • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing	— downwards	10 mm
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  • solid or stranded • finely stranded • finely stranded with core end processing  • finely stranded • finely stranded with core end processing • finely stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded • finely stranded with core end processing	— at the side	6 mm
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  • solid or stranded • finely stranded • finely stranded with core end processing  • finely stranded • finely stranded with core end processing • finely stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded • finely stranded with core end processing	Connections/ Terminals	
<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>type of connectable conductor cross-sections</li> <li>for main contacts</li> <li>— solid or stranded</li> <li>— at AWG cables for main contacts</li> <li>at AWG conductor cross-section for main contacts</li> <li>finely stranded with core end processing</li> <li>at AWG conductor cross-section for main contacts</li> <li>finely stranded with core end processing</li> <li>at AWG conductor cross-section for main contacts</li> <li>finely stranded with core end processing</li> <li>at a AWG conductor cross-section for main contacts</li> <li>finely stranded with core end processing</li> <li>at a AWG conductor cross-section for main contacts</li> <li>finely stranded with core end processing</li> <li>at a AWG conductor cross-section for main contacts</li> <li>finely stranded with core end processing</li> <li>at a AWG conductor cross-section for auxiliary contacts</li> <li>finely stranded</li> <li>finely stranded with core end processing</li> <li>at a AWG conductor cross-section for auxiliary contacts</li> <li>finely stranded</li> <li>finely stranded with core end processing</li> <li>at a AWG conductor cross-section for auxiliary contacts</li> <li>finely stranded</li> <li>finely stranded with core end processing</li> <li>finely stranded with core end processing</li> </ul>		
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<ul> <li>at contactor for auxiliary contacts</li> <li>of magnet coil</li> <li>type of connectable conductor cross-sections</li> <li>for main contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>at AWG cables for main contacts</li> <li>finely stranded with core end processing</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> </ul>		*,
<ul> <li>of magnet coil</li> <li>type of connectable conductor cross-sections</li> <li>for main contacts</li> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> <li>at AWG cables for main contacts</li> <li>onnectable conductor cross-section for main contacts</li> <li>finely stranded with core end processing</li> <li>of inely stranded with core end processing</li> <li>of inely stranded</li> <li>of inely stranded with core end processing</li> </ul>		
type of connectable conductor cross-sections  • for main contacts  — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts  • finely stranded with core end processing  connectable conductor cross-section for auxiliary contacts  • solid or stranded • finely stranded with core end processing  • finely stranded with core end processing  0.5 2.5 mm²		
<ul> <li>for main contacts         — solid or stranded         — finely stranded with core end processing         • at AWG cables for main contacts         • finely stranded with core end processing         • finely stranded with core end processing         • finely stranded with core end processing         connectable conductor cross-section for main contacts         • solid or stranded         • solid or stranded         • finely stranded with core end processing         • solid or stranded         • finely stranded with core end processing         • fin</li></ul>		Octow-type terminals
<ul> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> <li>• at AWG cables for main contacts</li> <li>• finely stranded with core end processing</li> <li>• finely stranded with core end processing</li> <li>• finely stranded with core end processing</li> <li>connectable conductor cross-section for main contacts</li> <li>• finely stranded with core end processing</li> <li>• solid or stranded</li> <li>• finely stranded with core end processing</li> <li>0.5 2.5 mm²</li> <li>0.5 2.5 mm²</li> </ul>		
<ul> <li>— finely stranded with core end processing         <ul> <li>at AWG cables for main contacts</li> <li< td=""><td></td><td>2v /4 2F mm²\ 4v /4 F0 mm²\</td></li<></ul></li></ul>		2v /4 2F mm²\ 4v /4 F0 mm²\
<ul> <li>at AWG cables for main contacts</li> <li>connectable conductor cross-section for main contacts</li> <li>finely stranded with core end processing</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>1 35 mm²</li> <li>0.5 2.5 mm²</li> <li>finely stranded with core end processing</li> <li>0.5 2.5 mm²</li> </ul>		
connectable conductor cross-section for main contacts  • finely stranded with core end processing  connectable conductor cross-section for auxiliary contacts  • solid or stranded • finely stranded with core end processing  0.5 2.5 mm²  0.5 2.5 mm²		
contacts		2x (18 2), 1x (18 1)
<ul> <li>finely stranded with core end processing</li> <li>connectable conductor cross-section for auxiliary contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>1 35 mm²</li> <li>0.5 2.5 mm²</li> <li>0.5 2.5 mm²</li> </ul>		
connectable conductor cross-section for auxiliary contacts		4 052
contacts		1 35 mm²
<ul> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>0.5 2.5 mm²</li> <li>0.5 2.5 mm²</li> </ul>		
• finely stranded with core end processing 0.5 2.5 mm²		0.5 2.5 mm²
type of connectable conductor cross-sections		0.0 2.0 IIIIII
	type of confiectable conductor cross-sections	

• for auxiliary contacts

- solid or stranded

- finely stranded with core end processing

• at AWG cables for auxiliary contacts

AWG number as coded connectable conductor cross section

• for main contacts

· for auxiliary contacts

2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>) 2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)

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

18 ... 1 20 ... 14

## Safety related data

#### product function

• mirror contact according to IEC 60947-4-1

positively driven operation according to IEC 60947-

B10 value with high demand rate according to SN 31920 **proportion of dangerous failures** 

with low demand rate according to SN 31920

with high demand rate according to SN 31920
 failure rate [FIT] with low demand rate according to SN
 1

31920

T1 value for proof test interval or service life according to IEC 61508

protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529

suitability for use

• safety-related switching OFF

Yes

No

1 000 000

40 %

73 % 100 FIT

20 y

IP20

finger-safe, for vertical contact from the front

Yes

# Certificates/ approvals

### **General Product Approval**





Confirmation



**Miscellaneous** 

<u>KC</u>

**General Product Approval** 

**EMC** 

Functional Safety/Safety of Machinery

Declaration of Conformity

**Test Certificates** 

EAC



Type Examination Certificate





Type Test Certificates/Test Report

**Test Certificates** 

Marine / Shipping

Special Test Certificate











Marine / Shipping

other

Railway

Dangerous Good

RINA



Confirmation

Confirmation

Vibration and Shock

<u>Transport Information</u>

Further information

Information- and Downloadcenter (Catalogs, Brochures,...) <a href="https://www.siemens.com/ic10">https://www.siemens.com/ic10</a>

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2036-1NB30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2036-1NB30

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2036-1NB30

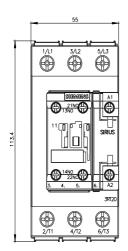
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2036-1NB30&lang=en

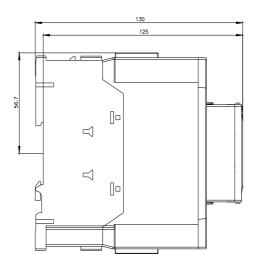
Characteristic: Tripping characteristics, I²t, Let-through current

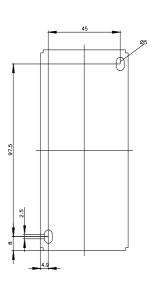
https://support.industry.siemens.com/cs/ww/en/ps/3RT2036-1NB30/char

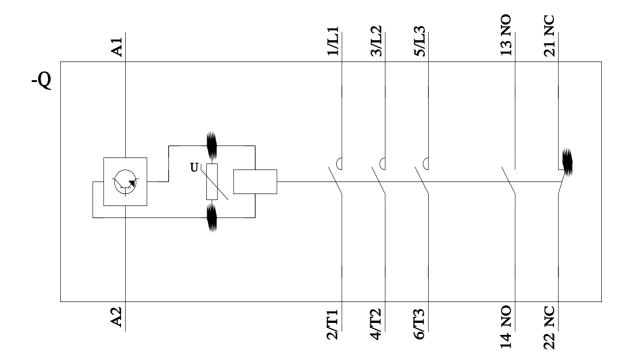
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2036-1NB30&objecttype=14&gridview=view1









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