SIEMENS

Data sheet 3RT2036-1NB30

power contactor, AC-3 50 A, 22 kW / 400 V 1 NO + 1 NC, AC / DC 20-33 V, with varistor, 3-pole, Size S2, screw terminal



Figure similar

Product brand name	SIRIUS
Product designation	Power contactor
Product type designation	3RT2

General technical data	
Size of contactor	S2
Product extension	
 function module for communication 	No
Auxiliary switch	Yes
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 acc. to EN 	400 V
60947-1	
Protection class IP	
• on the front	IP20
of the terminal	IP00

Shock resistance at rectangular impulse	
• at AC	7.7g / 5 ms, 4.5g / 10 ms
• at DC	7.7g / 5 ms, 4.5g / 10 ms
Shock resistance with sine pulse	
• at AC	12g / 5 ms, 7g / 10 ms
• at DC	12g / 5 ms, 7g / 10 ms
Mechanical service life (switching cycles)	
of contactor typical	10 000 000
 of the contactor with added electronics- 	5 000 000
compatible auxiliary switch block typical	
 of the contactor with added auxiliary switch block typical 	10 000 000
Reference code acc. to DIN 40719 extended	К
according to IEC 204-2 acc. to IEC 750	
Reference code acc. to DIN EN 81346-2	Q
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
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
Operating current	
• at AC-1 at 400 V	
— at ambient temperature 40 °C rated value	70 A
• at AC-1	
 up to 690 V at ambient temperature 40 °C rated value 	70 A
— up to 690 V at ambient temperature 60 °C	60 A
rated value	50.4
• at AC-2 at 400 V rated value	50 A
• at AC-3	
— at 400 V rated value	51 A
— at 500 V rated value	51 A
— at 500 V rated value— at 690 V rated value	24 A

• at 60 °C minimum permissible • at 40 °C minimum permissible 25 mm² Operating current for approx. 200000 operating cycles at AC-4 • at 400 V rated value 20 A Operating current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 440 V rated value • with 2 current paths in series at DC-1 — at 220 V rated value — at 110 V rated value — at 440 V rated value — at 440 V rated value — at 440 V rated value — at 220 V rated value — at 110 V rated value — at 440 V rated value — at 220 V rated value — at 220 V rated value — at 440 V rated value — at 220 V rated value — at 220 V rated value — at 24 V rated value — at 25 A — at 110 V rated value — at 440 V rated value — at 29 A — at 20 V rated value — at 440 V rated value	
Operating current for approx. 200000 operating cycles at AC-4 • at 400 V rated value	
at 400 V rated value at 690 V rated value 20 A Operating current at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 440 V rated value — at 4600 V rated value — at 600 V rated value — at 600 V rated value — at 220 V rated value — at 24 V rated value — at 440 V rated value — at 600 V rated value — at 24 V rated value — at 110 V rated value — at 110 V rated value — at 110 V rated value — at 440 V rated value — at 600 V rated value — at 220 V rated value — at 24 V rated value — at 27 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 600 V rated value — at 110 V rated value — at 22 V rated value	
• at 690 V rated value Operating current • at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 24 V rated value — at 24 V rated value — at 24 V rated value — at 25 A • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 600 V rated value — at 220 V rated value — at 220 V rated value — at 220 V rated value — at 440 V rated value — at 220 V rated value — at 24 V rated value — at 220 V rated value — at 24 V rated value — at 25 A — at 110 V rated value — at 440 V rated value — at 45 A — at 220 V rated value — at 600 V rated value — at 600 V rated value — at 40 V rated value — at 410 V rated value — at 42 V rated value — at 410 V rated value — at 600 V rated value —	
Operating 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 0.4 A — at 4600 V rated value 0.25 A • with 2 current paths in series at DC-1 55 A — at 24 V rated value 45 A — at 110 V rated value 5 A — at 440 V rated value 1 A — at 600 V rated value 0.8 A • with 3 current paths in series at DC-1 55 A — 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 440 V rated value 1.4 A Operating current • at 1 current path at DC-3 at DC-5 — at 24 V rated value 35 A — at 110 V rated value 2.5 A — at 220 V rated value 2.5 A — at 220 V rated value 2.5 A — at 220 V rated value 2.5 A	
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at 24 V rated value 55 A at 110 V rated value 1 A at 220 V rated value 1 A at 440 V rated value 0.4 A at 600 V rated value 0.25 A ■ with 2 current paths in series at DC-1 at 24 V rated value 55 A at 110 V rated value 5A at 220 V rated value 5A at 220 V rated value 5A at 240 V rated value 1 A at 600 V rated value 0.8 A ■ with 3 current paths in series at DC-1 at 24 V rated value 55 A at 110 V rated value 55 A at 110 V rated value 55 A at 220 V rated value 55 A at 220 V rated value 2.9 A at 440 V rated value 2.9 A at 600 V rated value 1.4 A Operating current ■ at 1 current path at DC-3 at DC-5 at 24 V rated value 35 A at 110 V rated value 35 A at 110 V rated value 1.4 A	
- at 110 V rated value	
at 220 V rated value	
- at 440 V rated value	
 — at 600 V rated value ● with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 600 V rated value — with 3 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value — at 220 V rated value — at 440 V rated value — at 440 V rated value — at 600 V rated value — at 600 V rated value — at 24 V rated value — at 25 A — at 27 V rated value — at 27 V rated value — at 28 V rated value — at 29 V rated value — at 20 V rated value — at 220 V rated value 	
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- at 24 V rated value 55 A - at 110 V rated value 5 A - at 220 V rated value 5 A - at 440 V rated value 1 A - at 600 V rated value 0.8 A • with 3 current paths in series at DC-1 - at 24 V rated value 55 A - at 110 V rated value 55 A - at 220 V rated value 45 A - at 440 V rated value 2.9 A - at 600 V rated value 1.4 A Operating current • at 1 current path at DC-3 at DC-5 - at 24 V rated value 35 A - at 110 V rated value 35 A - at 110 V rated value 1.4 A	
- at 110 V rated value 45 A - at 220 V rated value 5 A - at 440 V rated value 1 A - at 600 V rated value 0.8 A ● with 3 current paths in series at DC-1 - at 24 V rated value 55 A - at 110 V rated value 45 A - at 440 V rated value 45 A - at 440 V rated value 2.9 A - at 600 V rated value 1.4 A Operating current ● at 1 current path at DC-3 at DC-5 - at 24 V rated value 35 A - at 110 V rated value 35 A - at 110 V rated value 1.4 A	
- at 220 V rated value 5 A - at 440 V rated value 1 A - at 600 V rated value 0.8 A ■ with 3 current paths in series at DC-1 - at 24 V rated value 55 A - at 110 V rated value 55 A - at 220 V rated value 45 A - at 440 V rated value 2.9 A - at 600 V rated value 1.4 A Operating current ■ at 1 current path at DC-3 at DC-5 - at 24 V rated value 35 A - at 110 V rated value 35 A - at 110 V rated value 35 A - at 220 V rated value 1.4 A	
- at 440 V rated value 1 A - at 600 V rated value 0.8 A ● with 3 current paths in series at DC-1 - at 24 V rated value 55 A - at 110 V rated value 45 A - at 220 V rated value 2.9 A - at 600 V rated value 1.4 A Operating current ● at 1 current path at DC-3 at DC-5 - at 24 V rated value 35 A - at 110 V rated value 35 A - at 110 V rated value 35 A - at 120 V rated value 1.4 A	
— at 600 V rated value 0.8 A • with 3 current paths in series at DC-1 — at 24 V rated value 55 A — at 110 V rated value 55 A — at 220 V rated value 45 A — at 440 V rated value 2.9 A — at 600 V rated value 1.4 A Operating current • at 1 current path at DC-3 at DC-5 — at 24 V rated value 35 A — at 110 V rated value 2.5 A — at 220 V rated value 35 A — at 220 V rated value 1.4 A	
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 — at 440 V rated value — at 600 V rated value 1.4 A Operating current at 1 current path at DC-3 at DC-5 — at 24 V rated value — at 110 V rated value — at 220 V rated value 1 A 	
— at 600 V rated value Operating current • at 1 current path at DC-3 at DC-5 — at 24 V rated value 35 A — at 110 V rated value 2.5 A — at 220 V rated value 1 A	
Operating current • at 1 current path at DC-3 at DC-5 — at 24 V rated value — at 110 V rated value 2.5 A — at 220 V rated value 1 A	
 at 1 current path at DC-3 at DC-5 — at 24 V rated value — at 110 V rated value — at 220 V rated value 1 A 	
 at 24 V rated value at 110 V rated value at 220 V rated value 1 A 	
 — at 110 V rated value — at 220 V rated value 1 A 	
— at 220 V rated value 1 A	
— at 440 V rated value 0.1 A	
— at 600 V rated value 0.06 A	
• with 2 current paths in series at DC-3 at DC-5	
— at 24 V rated value 55 A	
— at 110 V rated value 25 A	
— at 220 V rated value 5 A	
— at 440 V rated value 0.27 A	
— at 600 V rated value 0.16 A	
• with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value 55 A	
— at 110 V rated value 55 A	

— at 220 V rated value	25 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.35 A
Operating power	
• at AC-1	
— at 230 V rated value	26 kW
— at 230 V at 60 °C rated value	23 kW
— at 400 V rated value	46 kW
— at 400 V at 60 °C rated value	39 kW
— at 690 V rated value	79 kW
— at 690 V at 60 °C rated value	68 kW
• 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
— 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 690 V rated value	18.2 kW
Thermal short-time current limited to 10 s	420 A
Power loss [W] at AC-3 at 400 V for rated value of	4 W
the operating current per conductor	
No-load switching frequency	
• at AC	1 500 1/h
• at DC	1 500 1/h
Operating frequency	
• at AC-1 maximum	1 000 1/h
• at AC-2 maximum	600 1/h
• at AC-3 maximum	800 1/h
• at AC-4 maximum	250 1/h
Control circuit/ Control	AOIDO
Type of voltage of the control supply voltage	AC/DC
Control supply voltage at AC	20 22 1/
at 50 Hz rated value	20 33 V
• at 60 Hz rated value	20 33 V
Control supply voltage at DC	20 22 1/
• 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	
• at 24 V	2.8 A
Duration of inrush current peak	
• at 24 V	15 μs
Apparent pick-up power of magnet coil at AC	
● 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	
• at AC	45 70 ms
• at DC	45 60 ms
Opening delay	
• at AC	35 55 ms
• at DC	35 55 ms
Arcing time	10 20 ms
Control version of the switch operating mechanism	Standard A1 - A2
Residual current of the electronics for control with signal <0>	
• at AC at 230 V maximum permissible	20 mA
• at DC at 24 V maximum permissible	20 mA
Auxiliary circuit	
Number of NC contacts for auxiliary contacts	
• instantaneous contact	1
Number of NO contacts for auxiliary contacts	
• instantaneous contact	1
Operating current at AC-12 maximum	10 A
Operating 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
Operating current at DC-12	

Contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
● at 600 V rated value	0.1 A
• at 220 V rated value	0.3 A
• at 125 V rated value	0.9 A
• at 110 V rated value	1 A
• at 60 V rated value	2 A
• at 48 V rated value	2 A
• at 24 V rated value	10 A
Operating current at DC-13	
• at 600 V rated value	0.15 A
• at 220 V rated value	1 A
• at 125 V rated value	2 A
• at 110 V rated value	3 A
• at 60 V rated value	6 A
• at 48 V rated value	6 A
• at 24 V rated value	10 A

UL/CSA ratings	
Full-load current (FLA) for three-phase AC motor	
● at 480 V rated value	52 A
● at 600 V rated value	52 A
Yielded mechanical performance [hp]	
 for single-phase AC motor 	
— at 110/120 V rated value	3 hp
— at 230 V rated value	10 hp
 for three-phase AC motor 	
— at 200/208 V rated value	15 hp
— at 220/230 V rated value	15 hp
— at 460/480 V rated value	40 hp
— at 575/600 V rated value	50 hp
Contact rating of auxiliary contacts according to UL	A600 / P600

Short-circuit protection

Design of the fuse link

- for short-circuit protection of the main circuit
 - with type of coordination 1 required

gG: 160 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125

A (415 V, 80 kA)

— with type of assignment 2 required

gG: 80A (690V,100kA), aM: 50A (690V,100kA), BS88: 63A

(415V,80kA)

 \bullet for short-circuit protection of the auxiliary switch

required

fuse gG: 10 A

Installation/ mounting/ dimensions

#-180" rotation possible on vertical mounting surface; can be tilled forward and backward by +/- 22.5" on vartical mounting surface #		
# Side-by-side mounting	Mounting position	tilted forward and backward by +/- 22.5° on vertical mounting
Height 114 mm Width 55 mm Depth 130 mm Required spacing • with side-by-side mounting - forwards 10 mm - upwards 10 mm - downwards 10 mm - at the side 0 mm • for grounded parts 10 mm - upwards 10 mm - at the side 6 mm - downwards 10 mm - in forwards 10 mm - for live parts 10 mm - forwards 10 mm - downwards 10 mm - downwards 10 mm - downwards 10 mm - downwards 10 mm - for main current circuit screw-type terminals * for main current circuit screw-type terminals * for main current circuit screw-type terminals * for main contacts 2x (1 35 mm²), 1x (1 50 mm²) • for main contacts 2x (1 25 mm²), 1x (1 35 mm²) • for main contacts 2x (1 25 mm²), 1x (1 35 mm²) • for main cont	Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail
Height 114 mm 155 mm 150 mm 1		according to DIN EN 60715
Width 55 mm 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 — at the side 6 mm — at the side 6 mm — downwards 10 mm • for live parts — forwards 10 mm • for main curent circuit screw-type terminals Type of electrical connection • for main current circuit screw-type terminals Type of connectable conductor cross-sections • for main contacts — single or multi-stranded 2x (1 25 mm²), 1x (1 35 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 • finely stranded with core end processing 1 35 mm² Connectable conductor cross-section for auxiliary contacts • single or multi-stranded • finely stranded with core end processing 1 35 mm² Connectable conductor cross-section for auxiliary contacts • single or multi-stranded	Side-by-side mounting	Yes
Pepth Sequired spacing ■ with side-by-side mounting — forwards 10 mm — upwards 10 mm — at the side 0 mm ■ for grounded parts — forwards 10 mm ■ at the side 0 mm ■ at the side 6 mm — upwards 10 mm — at the side 6 mm — at the side 6 mm ■ of rolive parts — forwards 10 mm ■ for live parts — at whe side 6 mm ■ of main current circuit 5 crew-type terminals Type of electrical connection ■ for auxiliary and control current circuit 5 crew-type terminals Type of connectable conductor cross-sections ■ finely stranded with core end processing 2x (1 25 mm²), 1x (1 35 mm²) Econnectable conductor cross-section for main contacts ■ finely stranded with core end processing 1 35 mm² Connectable conductor cross-section for main contacts ■ finely stranded with core end processing 1 35 mm² Connectable conductor cross-section for auxiliary contacts ■ single or multi-stranded 0.5 2.5 mm² ■ timely stranded with core end processing 1 35 mm² Connectable conductor cross-section for auxiliary contacts ■ single or multi-stranded 0.5 2.5 mm² ■ single or multi-stranded 0.5 2.5 mm² ■ single or multi-stranded 0.5 2.5 mm²	Height	114 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 — upwards — 10 mm — at the side — downwards — 10 mm — at the side — downwards — 10 mm • for live parts — forwards — 10 mm • for live parts — forwards — upwards — 10 mm — at the side — downwards — 10 mm — downwards — 10 mm — at the side — forwards — 10 mm — of or live parts — forwards — 10 mm — of or main current circuit — of or main current circuit — for main current circuit — for main current circuit — for main contacts — single or multi-stranded — finely stranded with core end processing — at AWG conductors for main contacts • finely stranded with core end processing — finely stranded with core end pr	Width	
with side-by-side mounting — forwards — upwards — downwards — at the side — of or grounded parts — forwards — forwards — upwards — forwards — upwards — upwards — upwards — at the side — downwards — to fill it is parts — downwards — of or live parts — forwards — upwards — downwards — upwards — upwards — downwards — upwards — upwards — downwards — upwards — downwards — downwards — downwards — at the side — formal — at the side — formal — downwards — at the side — formal — at the side — formal — downwards — at the side — formal — formal — at the side — formal — formal — at the side — formal — formal — at the side — formal — at the side — formal — formal — at the side — formal — for	Depth	130 mm
forwards	Required spacing	
— upwards 10 mm 10	with side-by-side mounting	
- downwards	— forwards	10 mm
- at the side • for grounded parts - forwards - upwards - upwards - at the side - downwards • for live parts - forwards - upwards - to rowards - to rowards - to rowards - to mm • for live parts - forwards - upwards - upwards - upwards - downwards - downwards - at the side Connections/Terminals Type of electrical connection • for main current circuit • for auxiliary and control current circuit Type of connectable conductor cross-sections • for main contacts - single or multi-stranded - finely stranded with core end processing • at AWG conductors for main contacts • finely stranded with core end processing • at finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • at AWG conductors for main contacts • finely stranded with core end processing • at AWG conductors for main contacts • finely stranded with core end processing • at AWG conductors for main contacts • finely stranded with core end processing • at AWG conductors for main contacts • finely stranded with core end processing	— upwards	10 mm
for grounded parts — forwards — upwards — at the side — downwards — forwards — downwards — forwards — forwards — forwards — forwards — upwards — upwards — upwards — upwards — downwards — downwards — at the side Connections/Terminals Type of electrical connection • for main current circuit • for auxiliary and control current circuit • for auxiliary and control current circuit — single or multi-stranded — finely stranded with core end processing • at AWG conductors for main contacts • finely stranded with core end processing • single or multi-stranded	— downwards	10 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 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 current circuit screw-type terminals Type of connectable conductor cross-sections • for main contacts single or multi-stranded 2x (1 35 mm²), 1x (1 50 mm²) at AWG conductors for main contacts 2x (1 25 mm²), 1x (1 35 mm²) • at AWG conductors for main contacts • finely stranded with core end processing 1 35 mm² Connectable conductor cross-section for main contacts • finely stranded with core end processing 1 35 mm² Connectable conductor cross-section for auxiliary contacts • single or multi-stranded 0.5 2.5 mm²	— at the side	0 mm
- upwards	• for grounded parts	
- at the side	— forwards	10 mm
- downwards • for live parts - forwards - upwards - downwards - downwards - at the side Connections/Terminals Type of electrical connection • for main current circuit • for auxiliary and control current circuit Type of connectable conductor cross-sections • for main contacts - single or multi-stranded - at AWG conductor cross-section for main contacts • finely stranded with core end processing • single or multi-stranded • single or multi-stranded • single or multi-stranded 0.5 2.5 mm²	— upwards	10 mm
for live parts — forwards — upwards — downwards — at the side Connections/Terminals Type of electrical connection • for main current circuit • for auxiliary and control current circuit	— at the side	6 mm
- 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 current circuit screw-type terminals Type of connectable conductor cross-sections • for main contacts - single or multi-stranded 2x (1 35 mm²), 1x (1 50 mm²) - at AWG conductors for main contacts 2x (1 25 mm²), 1x (1 35 mm²) Connectable conductor cross-section for main contacts • finely stranded with core end processing • finely stranded with core end processing Connectable conductor cross-section for auxiliary contacts • single or multi-stranded 0.5 2.5 mm²	— downwards	10 mm
- upwards - downwards - at the side Connections/Terminals Type of electrical connection • for main current circuit • for auxiliary and control current circuit Type of connectable conductor cross-sections • for main contacts - single or multi-stranded • at AWG conductors for main contacts • finely stranded with core end processing • at AWG conductor cross-section for main contacts • finely stranded with core end processing • finely stranded with core end processing • single or multi-stranded • single or multi-stranded 0.5 2.5 mm²	• for live parts	
- downwards - at the side Connections/Terminals Type of electrical connection • for main current circuit • for auxiliary and control current circuit Type of connectable conductor cross-sections • for main contacts - single or multi-stranded • at AWG conductors for main contacts • finely stranded with core end processing • single or multi-stranded Connectable conductor cross-section for main contacts • finely stranded with core end processing • single or multi-stranded 0.5 2.5 mm²	— forwards	10 mm
— at the side Connections/Terminals Type of electrical connection • for main current circuit • for auxiliary and control current circuit Type of connectable conductor cross-sections • for main contacts — single or multi-stranded — finely stranded with core end processing • at AWG conductors for main contacts • finely stranded with core end processing • finely stranded with core end processing • 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 • finely stranded with core end processing Connectable conductor cross-section for auxiliary contacts • single or multi-stranded 0.5 2.5 mm²	— upwards	10 mm
Type of electrical connection • for main current circuit • for auxiliary and control current circuit Type of connectable conductor cross-sections • for main contacts — single or multi-stranded — finely stranded with core end processing • at AWG conductors for main contacts • finely stranded with core end processing • single or multi-stranded • single or multi-stranded • single or multi-stranded	— downwards	10 mm
Type of electrical connection • for main current circuit • for auxiliary and control current circuit Type of connectable conductor cross-sections • for main contacts — single or multi-stranded — finely stranded with core end processing • at AWG conductors for main contacts • finely stranded with core end processing • at higher than the finely stranded with core end processing • finely stranded with core end processing Connectable conductor cross-section for auxiliary contacts • single or multi-stranded 0.5 2.5 mm²	— at the side	6 mm
for main current circuit for auxiliary and control current circuit Type of connectable conductor cross-sections for main contacts — single or multi-stranded — finely stranded with core end processing • at AWG conductors for main contacts — finely stranded with core end processing • at necessary and conductors for main contacts • finely stranded with core end processing • at a necessary and conductors for main contacts • finely stranded with core end processing • finely stranded with core end processing • single or multi-stranded O.5 2.5 mm²	Connections/Terminals	
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Type of connectable conductor cross-sections • for main contacts — single or multi-stranded — finely stranded with core end processing • at AWG conductors for main contacts Connectable conductor cross-section for main contacts • finely stranded with core end processing • finely stranded with core end processing 1 35 mm² 1 35 mm² Connectable conductor cross-section for auxiliary contacts • single or multi-stranded 0.5 2.5 mm²		
 for main contacts single or multi-stranded finely stranded with core end processing at AWG conductors for main contacts Connectable conductor cross-section for main contacts finely stranded with core end processing 35 mm² Connectable conductor cross-section for auxiliary contacts single or multi-stranded 2x (1 35 mm²), 1x (1 35 mm²) 2x (18 2), 1x (18 1) 		screw-type terminals
 — single or multi-stranded — finely stranded with core end processing • at AWG conductors for main contacts ○ at AWG conductor cross-section for main contacts • finely stranded with core end processing • finely stranded with core end processing 1 35 mm² Connectable conductor cross-section for auxiliary contacts • single or multi-stranded 0.5 2.5 mm² 		
— finely stranded with core end processing • at AWG conductors for main contacts Connectable conductor cross-section for main contacts • finely stranded with core end processing 1 35 mm² 1 35 mm² Connectable conductor cross-section for auxiliary contacts • single or multi-stranded 0.5 2.5 mm²		
 at AWG conductors for main contacts Connectable conductor cross-section for main contacts finely stranded with core end processing 1 35 mm² Connectable conductor cross-section for auxiliary contacts single or multi-stranded 0.5 2.5 mm² 	_	
Connectable conductor cross-section for main contacts • finely stranded with core end processing Connectable conductor cross-section for auxiliary contacts • single or multi-stranded 0.5 2.5 mm²	 finely stranded with core end processing 	
contacts		2x (18 2), 1x (18 1)
 finely stranded with core end processing Connectable conductor cross-section for auxiliary contacts single or multi-stranded 1 35 mm² 0.5 2.5 mm² 		
Connectable conductor cross-section for auxiliary contacts • single or multi-stranded 0.5 2.5 mm²		4 25 mm²
contacts ● single or multi-stranded 0.5 2.5 mm²		1 35 mm²
en green and a second a second and a second a second and a second a second and a second and a second and a second and a se	-	
• finely stranded with core end processing 0.5 2.5 mm²	• single or multi-stranded	0.5 2.5 mm²
	 finely stranded with core end processing 	0.5 2.5 mm²

for auxiliary contacts

 single or multi-stranded
 finely stranded with core end processing
 at AWG conductors for auxiliary contacts

 AWG number as coded connectable conductor cross section

 for main contacts
 for auxiliary contacts

 18 ... 1
 for auxiliary contacts

Safety related data	
B10 value	
 with high demand rate acc. to SN 31920 	1 000 000
Proportion of dangerous failures	
 with low demand rate acc. to SN 31920 	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	
 Mirror contact acc. to IEC 60947-4-1 	Yes
positively driven operation acc. to IEC 60947-5-	No
T1 value for proof test interval or service life acc. to IEC 61508	20 y
Protection against electrical shock	finger-safe when touched vertically from front acc. to IEC 60529

Certificates/approvals

General Product Approval

Functional Safety/Safety of Machinery







Miscellaneous



Type Examination
Certificate

Declaration of	
Conformity	

Test Certificates

Marine / Shipping



Type Test Certificates/Test Report

Special Test Certificate







Marine / Shipping

other









Confirmation

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

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

Cax online generator

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

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

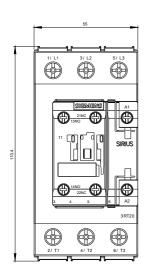
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2036-1NB30&lang=en

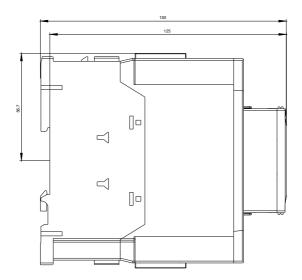
Characteristic: Tripping characteristics, I2t, Let-through current

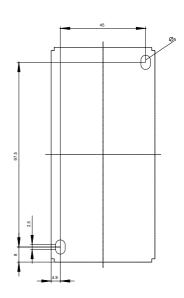
https://support.industry.siemens.com/cs/ww/en/ps/3RT2036-1NB30/char

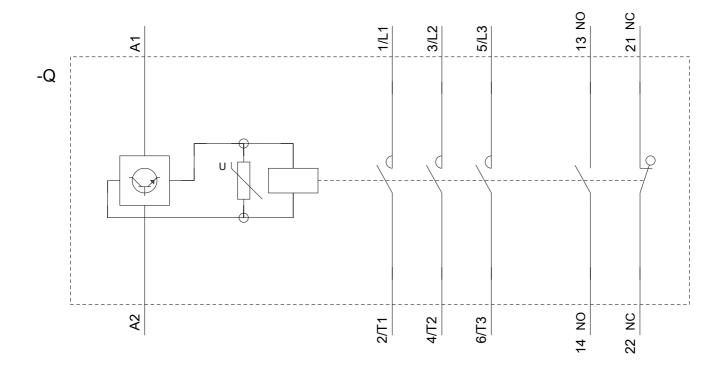
Further characteristics (e.g. electrical endurance, switching frequency)

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









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