SIEMENS

Data sheet 3RT2027-1BW40



power contactor, AC-3e/AC-3, 32 A, 15 kW / 400 V, 3-pole, 48 V DC, auxiliary contacts: 1 NO + 1 NC, screw terminal, size: S0 $\,$

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S0
product extension	
 function module for communication 	No
auxiliary switch	Yes
power loss [W] for rated value of the current	
 at AC in hot operating state 	6.3 W
 at AC in hot operating state per pole 	2.3 W
 without load current share typical 	5.9 W
type of calculation of power loss depending on pole	quadratic
insulation voltage	
 of main circuit with degree of pollution 3 rated value 	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 DC	10g / 5 ms, 7,5g / 10 ms
shock resistance with sine pulse	
• at DC	15g / 5 ms, 10g / 10 ms
mechanical service life (operating cycles)	
of contactor typical	10 000 000
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000
 of the contactor with added auxiliary switch block typical 	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
Weight	0.599 kg
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 %

Environmental footprint	
Environmental Product Declaration(EPD)	Yes
global warming potential [CO2 eq] total	221 kg
global warming potential [CO2 eq] during manufacturing	2.65 kg
global warming potential [CO2 eq] during operation	219 kg
global warming potential [CO2 eq] after end of life	-0.639 kg
Main circuit	0.000
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
at AC-3e rated value maximum	690 V
operational current	000 V
at AC-1 at 400 V at ambient temperature 40 °C rated value at AC-1	50 A
up to 690 V at ambient temperature 40 °C rated value	50 A
— up to 690 V at ambient temperature 60 $^{\circ}\text{C}$ rated value	42 A
• at AC-3	
— at 400 V rated value	32 A
— at 500 V rated value	32 A
— at 690 V rated value● at AC-3e	21 A
— at 400 V rated value	32 A
— at 500 V rated value	32 A
— at 690 V rated value	21 A
• at AC-4 at 400 V rated value	22 A
• at AC-5a up to 690 V rated value	44 A
at AC-5b up to 400 V rated value	26.5 A
• at AC-6a	
— up to 230 V for current peak value n=20 rated value	30.8 A
— up to 400 V for current peak value n=20 rated value	30.8 A
— up to 500 V for current peak value n=20 rated value	27 A
— up to 690 V for current peak value n=20 rated value• at AC-6a	21 A
— up to 230 V for current peak value n=30 rated value	20.5 A
— up to 400 V for current peak value n=30 rated value	20.5 A
— up to 500 V for current peak value n=30 rated value	18 A
— up to 690 V for current peak value n=30 rated value	18 A
minimum cross-section in main circuit at maximum AC-1 rated value	10 mm²
operational current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	12 A
at 690 V rated value	12 A
operational current	
• at 1 current path at DC-1	
— at 24 V rated value	35 A
— at 60 V rated value	20 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
 with 2 current paths in series at DC-1 	
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	35 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	35 A
— at 60 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	35 A
— at 440 V rated value	2.9 A
— at 600 V rated value	1.4 A
at 1 current path at DC-3 at DC-5	LHA
— at 24 V rated value	20 A
— at 60 V rated value	5 A
— at 110 V rated value	2.5 A
— at 220 V rated value	1A
— at 440 V rated value — at 440 V rated value	0.09 A
— at 600 V rated value	0.06 A
with 2 current paths in series at DC-3 at DC-5 at 24 V reted value.	25 A
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	15 A
— at 220 V rated value	3 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 reted value.	25.4
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	10 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.6 A
operating power	
• at AC-3	751111
— at 230 V rated value	7.5 kW
— at 400 V rated value	15 kW
— at 500 V rated value	15 kW
— at 690 V rated value	18.5 kW
• at AC-3e	751111
— at 230 V rated value	7.5 kW
— at 400 V rated value	15 kW
— at 500 V rated value	15 kW
— at 690 V rated value	18.5 kW
operating power for approx. 200000 operating cycles at AC-	
at 400 V rated value	6 kW
at 690 V rated value	10.3 kW
operating apparent power at AC-6a	
up to 230 V for current peak value n=20 rated value	12.2 kVA
up to 400 V for current peak value n=20 rated value	21.3 kVA
up to 500 V for current peak value n=20 rated value	23.3 kVA
up to 690 V for current peak value n=20 rated value	25 kVA
operating apparent power at AC-6a	
up to 230 V for current peak value n=30 rated value	8.1 kVA
up to 400 V for current peak value n=30 rated value	14.2 kVA
up to 500 V for current peak value n=30 rated value	15.5 kVA
up to 690 V for current peak value n=30 rated value	21.5 kVA
short-time withstand current in cold operating state up to 40 °C	
Iimited to 1 s switching at zero current maximum	499 A; Use minimum cross-section acc. to AC-1 rated value
limited to 5 s switching at zero current maximum	341 A; Use minimum cross-section acc. to AC-1 rated value
limited to 10 s switching at zero current maximum	260 A; Use minimum cross-section acc. to AC-1 rated value
limited to 30 s switching at zero current maximum	199 A; Use minimum cross-section acc. to AC-1 rated value
limited to 60 s switching at zero current maximum	162 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
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	4 500 4/L
• at DC	1 500 1/h
operating frequency	4.000.4//
• at AC-1 maximum	1 000 1/h
• at AC-2 maximum	750 1/h
• at AC-3 maximum	750 1/h
at AC-3e maximum	750 1/h
at AC-4 maximum	250 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	DC
control supply voltage at DC rated value	48 V
operating range factor control supply voltage rated value of	
magnet coil at DC	
• initial value	0.8
• full-scale value	1.1
closing power of magnet coil at DC	5.9 W
holding power of magnet coil at DC	5.9 W
closing delay	
• at DC	50 170 ms
opening delay	
• at DC	15 18 ms
arcing time	10 10 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous	1
contact 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 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 480 V rated value	27 A
at 600 V rated value	27 A
yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V rated value	2 hp
— at 230 V rated value	5 hp
	στιρ
• for 3-phase AC motor	10 hp
— at 200/208 V rated value— at 220/230 V rated value	10 hp 10 hp

— at 575/600 V rated value contact rating of auxiliary contacts according to UL A600 / P600 Short-circuit protection design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V design of the fuse link • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions	at 460/490 \/ rated value	20 hn
A600 / P600	— at 460/480 V rated value	20 hp
Short-Circuit protection of the auxiliary circuit to pe 230 V design of the maintaine circuit protection of the auxiliary control to pe 230 V design of the five file in the surflier for short-circuit protection of the auxiliary switch required manufactory mounting interestors festering method side-by-side mounting festering met		·
design of the ministure crount breaker for short-circuit protection of the auxiliary critical type 250 v. design of the fuse link		A600 / P600
of the auxiliary cricult up to 230 V design of the flux link		0.16-22-42-2-42-40-0-0-41-0
* for shortscircuit protection of the auxillary switch required meaning position mounting position fasterning method side-by-side mounting fasterning method side-by-side mounting fasterning method side-by-side mounting fasterning method side-by-side mounting form width depth frequired apacing * with side-by-side mounting - forwards - upwards - upwards - owwards - owwa	of the auxiliary circuit up to 230 V	C characteristic: 10 A; 0.4 kA
mounting position fasterning method disc-by-side mounting fasterning method disc-by-side mounting fasterning method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 80715 height	-	
mounting position activating position possible on ventical mounting surface: can be titled forward and backward by 4r. 22.5" on ventical mounting surface fastering method side-by-side mounting Yes fastering method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 beight 85 mm width 45 mm depth 107 mm required spacing • with side-by-side mounting — forwards — upwards — 10 mm — at the side • for grounded parts — forwards — upwards — 10 mm — at the side • for main current circuit — downwards • for live parts — forwards — upwards — 10 mm — odwnwards • for live parts — forwards — 10 mm • for main current circuit • for main current circuit • for auxiliary and control circuit • a connections of main contacts • for main contacts • of main contacts — solid — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts • solid • stranded — finely stranded with core end processing • for AWG cables for main contacts • solid or stranded — finely stranded with core end processing • for ownectable conductor cross-sections • for ownectable conductor cross-sections • for found contacts • solid or stranded — finely stranded with core end processing • for AWG cables for main contacts • solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts • solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts • solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts • solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts • solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts • for auxiliary contact		gG: 10 A (500 V, 1 kA)
fastering method side-by-side mounting Ves fastering method side-by-side mounting Ves fastering method side-by-side mounting screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 80715 ### Min side by-side mounting • with side by-side mounting • for leve parts • for grounded parts • for five parts • for main current circuit • for main contacts • solid - solid or stranded - linely stranded with core end processing • for MAVG cables for main contacts • solid or stranded • finely stranded with core end processing • for NAVG cables for main cortacts • solid or stranded • finely stranded with core end processing • for AVAYG cables for main cortacts • solid or stranded • finely stranded with core end processing • for AVAYG cables for main cortacts • solid or stranded • finely stranded with core end processing • for AVAYG cables for main cortacts • solid or stranded • finely stranded with core end processing • for AVAYG cables for main cortacts • solid or stranded • finely stranded with core end processing • for AVAYG cables for auxiliary contacts • for owner and complex for auxiliary contacts • for owner and complex for auxiliary contacts • for owner and the side owner auxiliary contacts • for owner and the side owner auxiliary contacts • for owner and the side owner auxiliary contacts • for owner and the side owner auxiliary contacts • for owner and the side owner auxiliary contacts • for owner and the side owner and processing • for AVAYG cables for auxiliary contacts • for owner and	Installation/ mounting/ dimensions	
fastening method height width depth 107 mm required spacing with side-by-side mounting - forwards - upwards - downwards - of orwards - the side - of orgrunded parts - forwards - upwards - the side - of orgrunded parts - forwards - upwards - the side - of mm - downwards - the side - downwards - the side - downwards - the side - downwards - to mm - downwards - to mm - downwards - to mm - for mian content crount - of or in an urrent circuit - for auxillary and control circuit - of or auxillary and control circuit - solid - solid or stranded - finely stranded with core end processing - for AVG cables for main contacts - solid - solid or stranded - finely stranded with core end processing - finely stranded with core end processing - finely stranded with core ond processing - for auxillary contacts - solid or stranded - finely stranded with core end processing - for faving stranded - finely stranded with core end processing - for faving stranded - finely stranded with core end processing - for stranded - finely stranded with core end processing - for faving stranded - finely stranded with core end processing - for AVG cables for main contacts - solid or stranded - finely stranded with core end processing - for stranded - finely stranded with core end processing - for avxiliary contacts - solid or stranded - finely stranded with core end processing - for AVG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing - for AVG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing - for AVG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing - for AVG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing - for AVG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing - for AVG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing - for AVG cables for auxiliary contacts - solid or strand	mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
height width 45 mm depth 107 mm required spacing • with side-by-side mounting — forwards 10 mm — upwards 10 mm — at the side • for grounded parts — lowards 10 mm — owards 10 mm — at the side • for grounded parts — lowards 10 mm — upwards 10 mm — at the side • for grounded parts — lowards 10 mm — at the side — at the side 6 mm — downwards 10 mm — to five parts — forwards 10 mm — to five parts — owards 10 mm	fastening method side-by-side mounting	Yes
width depth 107 mm required spacing • with side-by-side mounting - forwards 10 mm - upwards 10 mm - downwards 10 mm - orwards 10 mm - orwards 10 mm - orwards 10 mm - orwards 10 mm - upwards 10 mm - at the side 6 mm - downwards 10 mm - at the side 6 mm - downwards 10 mm - orwards 10 mm - orwards 10 mm - orwards 10 mm - orwards 10 mm - for live parts 10 mm - for live parts 10 mm - for live parts 10 mm - downwards 10 mm - downwards 10 mm - downwards 5 mm - orwards 10 mm - orwards 10 mm - serve-type terminals 10 mm - or main current circuit 5 scree-type terminals 6 mm - or main contacts 5 scree-type terminals 5 scree-type terminals 6 mm - for main contacts 6 or magnet coil 7 scree-type terminals 7 scree-type terminals 7 scree-type terminals 7 scree-type terminals 8 scree-type terminals 9 scr	fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
depth 107 mm required spacing with side-by-side mounting with side-by-side mounting	height	85 mm
required spacing with side-by-side mounting — forwards — upwards — downwards — of many and selection of main contacts of main contacts — solid — solid or stranded — finely stranded with core end processing — for main contacts — solid or stranded — finely stranded with core end processing — for ham and stranded — finely stranded with core end processing — for auxiliary contacts — solid or stranded — finely stranded with core end processing — for auxiliary contacts — solid or stranded — finely stranded with core end processing — for auxiliary contacts — solid or stranded — finely stranded with core end processing — for auxiliary contacts — solid or stranded — finely stranded with core end processing — for auxiliary contacts — solid or stranded — finely stranded with core end processing — for auxiliary contacts — solid or stranded — finely stranded with core end processing — for auxiliary contacts — solid or stranded — finely stranded with core end processing — for auxiliary contacts — solid or stranded — finely stranded with core end processing — for auxiliary contacts — solid or stranded — finely stranded with core end processing — for auxiliary contacts — solid or stranded — finely stranded with core end processing — for auxiliary contacts — solid or stranded — finely stranded with core end processing — for auxiliary contacts — solid or stranded — finely stranded with core end processing — solid or stranded — finely st	width	45 mm
• with side-by-side mounting - forwards - upwards - downwards - of grounded parts - forwards - forgrounded parts - forwards - upwards - at the side - downwards - at the side - downwards - at the side - downwards - to live parts - forwards - for live parts - forwards - for live parts - forwards - downwards - for main current circuit - for auxiliary and control circuit - st contactor for auxiliary contacts - so magnet coil type of electrical conductor cross-sections - for main contacts - solid - solid or stranded - finely stranded with core end processing - for AWG cables for main contacts - solid - stranded - finely stranded with core end processing - finely stranded with core end process	depth	107 mm
forwards upwards upwards upwards upwards upwards upwards upwards upwards upwards forwards upwards upward	required spacing	
- upwards	with side-by-side mounting	
- upwards	, c	10 mm
		10 mm
- at the side • for grounded parts - forwards - upwards - at the side - downwards - for live parts - forwards - forwards - forwards - downwards - for live parts - forwards - upwards - downwards - for man - at the side - forman cornection • for auxiliary and control circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil - solid - solid or stranded - finely stranded with core end processing • for AWG cables for main contacts - solid • finely stranded with core end processing • finely stranded with core end processing • 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 - 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 - solid or str	•	
• for grounded parts - forwards - upwards - at the side - downwards • for live parts - forwards - upwards - forwards - forwards - upwards - forwards - upwards - upwards - upwards - upwards - downwards - at the side - downwards - at the side - formal or 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 - solid - solid - stranded - finely stranded with core end processing • for AWG cables for main contacts • solid or stranded • finely stranded with core end processing • for AWG are and a stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded - finely stranded with core end processing • for auxiliary contacts • solid or stranded - finely stranded with core end processing • for auxiliary contacts • for auxili		
- forwards		
- upwards - at the side 6 mm 6 mm 6 mm 6 mm 7 mm 7 mm 7 mm 7 m		10 mm
- at the side — downwards 10 mm • for live parts		
- downwards • for live parts - forwards - upwards - downwards - downwards - at the side Connections/ Irreminals 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 - solid or stranded - finely stranded with core end processing • finely stranded with core end processing • for auxiliary contacts • solid or stranded - finely stranded with core end processing • for auxiliary contacts • solid or stranded - finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded - finely stranded with core end processing • for auxiliary contacts • solid or stranded - finely stranded with core end processing • for auxiliary contacts • f	•	
• for live parts		
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- upwards - downwards - at the side Connections/ Irraminals type of electrical connection • for main current circuit • at contactor for auxiliary and control circuit • at contactor for auxiliary contacts • for main contacts • for main contacts • for main contacts - solid - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end proce	•	40
- downwards - at the side Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts - solid - solid or stranded - finely stranded with core end processing • for new finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for AWG cables for auxiliary contacts • AWG number as coded connectable conductor cross section		
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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 — solid or stranded — finely stranded with core end processing • stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • for loos a stranded • finely stranded with core end processing • for AWG cables for main contacts • solid • stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for AWG cables for auxiliary contacts • for auxiliary contacts • solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts • solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts • solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section		
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• for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts — solid — solid or stranded — solid or stranded with core end processing • for AWG cables for main contacts • solid • solid • stranded with core end processing • for aWG cables for main contacts • solid • stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section	Connections/ Terminals	
 for auxiliary and control circuit at contactor for auxiliary contacts of magnet coil Screw-type terminals 2x (1 2.5 mm²) 2x (16 12), 2x (14 8) Screw-type terminals 2x (1 2.5 mm²) 2x (2 10 mm²) 2x (1 2.5 mm²) 2x (2 10 mm²) 2x (2 10 mm²) 2x (2	type of electrical connection	
 at contactor for auxiliary contacts of magnet coil Screw-type terminals Screw-type terminals Screw-type terminals Screw-type terminals type of connectable conductor cross-sections for main contacts — solid — solid or stranded — solid or stranded with core end processing for AWG cables for main contacts solid or stranded or stranded finely stranded with core end processing for auxiliary contacts solid or stranded finely stranded with core end processing for auxiliary contacts for auxiliary contacts solid or stranded for auxiliary contacts for auxiliary contacts for auxiliary contacts for AWG cables for auxiliary contacts for AWG number as coded connectable conductor cross section 	for main current circuit	screw-type terminals
of magnet coil type of connectable conductor cross-sections of or main contacts	 for auxiliary and control circuit 	screw-type terminals
type of connectable conductor cross-sections • for main contacts — solid — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • solid • 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 auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts — solid or stranded — finely stranded with core end processing • for auxiliary contacts — solid or stranded — finely stranded with core end processing • for auxiliary contacts — solid or stranded — finely stranded with core end processing • for auxiliary contacts — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section	 at contactor for auxiliary contacts 	
 for main contacts — solid — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts • solid • solid — finely stranded with core end processing • for AWG cables for main contacts • solid • stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • for auxiliary contacts • for auxiliary contacts — solid or stranded • for auxiliary contacts — solid or stranded — finely stranded with core end processing • for auxiliary contacts — solid or stranded — finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) • for AWG cables for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) • for AWG number as coded connectable conductor cross section • for AWG number as coded connectable conductor cross section • for AWG number as coded connectable conductor cross section • for AWG number as coded connectable conductor cross section • for AWG number as coded connectable conductor cross section	•	Screw-type terminals
- solid - solid - solid or stranded - finely stranded with core end processing - solid or stranded - stranded - finely stranded with core end processing - solid - stranded - solid - stranded - stranded - solid - solid - solid - solid - solid - stranded - solid	type of connectable conductor cross-sections	
- solid or stranded - finely stranded with core end processing • for AWG cables for main contacts • solid • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • 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 auxiliary contacts • solid or stranded • finely stranded with core end processing • for AWG cables for auxiliary contacts • for AWG cables for auxiliary contacts - Solid or stranded - Sol	 for main contacts 	
 — finely stranded with core end processing ● for AWG cables for main contacts Ex (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² 2x (16 12), 2x (14 8) Connectable conductor cross-section for main contacts ● solid ● stranded ● finely stranded with core end processing ■ solid or stranded ● finely stranded with core end processing ● finely stranded with core end processing ● finely stranded with core end processing ■ for auxiliary contacts — solid or stranded — solid or stranded — finely stranded with core end processing Ex (0.5 1.5 mm²), 2x (0.75 2.5 mm²) Ex (0.5 1.5 mm²), 2x (0.75 2.5 mm²) Ex (20 1.5 mm²), 2x (0.75 2.5 mm²) Ex (20 1.5 mm²), 2x (0.75 2.5 mm²) Ex (20 1.5 mm²), 2x (0.75 2.5 mm²) AWG number as coded connectable conductor cross section	— solid	2x (1 2.5 mm²), 2x (2.5 10 mm²)
 for AWG cables for main contacts connectable conductor cross-section for main contacts solid 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 finely stranded with core end processing for auxiliary contacts solid or stranded for auxiliary contacts for auxiliary contacts for auxiliary contacts finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) for AWG cables for auxiliary contacts for AWG cables for auxiliary contacts auxiliary contacts 2x (20 16), 2x (18 14) AWG number as coded connectable conductor cross section	— solid or stranded	2x (1 2.5 mm²), 2x (2.5 10 mm²)
connectable conductor cross-section for main contacts • solid • stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing for auxiliary contacts • for auxiliary contacts - solid or stranded - finely stranded 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) - finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 4x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	 finely stranded with core end processing 	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
 solid stranded finely stranded with core end processing finely stranded with core end processing solid or stranded finely stranded with core end processing finely stranded with core end processing for auxiliary contacts solid or stranded for auxiliary contacts for auxiliary contacts media or stranded for auxiliary contacts finely stranded with core end processing for AWG cables for auxiliary contacts for AWG cables for auxiliary contacts for AWG number as coded connectable conductor cross section 	• for AWG cables for main contacts	2x (16 12), 2x (14 8)
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 finely stranded with core end processing connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing for auxiliary contacts solid or stranded for auxiliary contacts for auxiliary contacts finely stranded with core end processing for AWG cables for auxiliary contacts for AWG number as coded connectable conductor cross section 	• solid	1 10 mm²
connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) - finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section	• stranded	1 10 mm²
connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) - finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 4x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	 finely stranded with core end processing 	1 10 mm²
 solid or stranded finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts solid or stranded finely stranded with core end processing for AWG cables for auxiliary contacts for AWG number as coded connectable conductor cross section 2. (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14)		
 ◆ finely stranded with core end processing type of connectable conductor cross-sections ◆ for auxiliary contacts — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section 0.5 2.5 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) 	-	0.5 2.5 mm²
type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14)		
 for auxiliary contacts — solid or stranded — finely stranded with core end processing for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14)		
 — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) 		
— finely stranded with core end processing other AWG cables for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) AWG number as coded connectable conductor cross section	•	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
● for AWG cables for auxiliary contacts 2x (20 16), 2x (18 14) AWG number as coded connectable conductor cross section		
AWG number as coded connectable conductor cross section		
• for main contacts 16 8	AWG number as coded connectable conductor cross	£A (£0 10), £A (10 17)
		16 8
• for auxiliary contacts 20 14		
Safety related data		

product function	
 mirror contact according to IEC 60947-4-1 	Yes
 positively driven operation according to IEC 60947-5-1 	No
suitable for safety function	Yes
suitability for use safety-related switching OFF	Yes
service life maximum	20 a
test wear-related service life necessary	Yes
proportion of dangerous failures	
 with low demand rate according to SN 31920 	40 %
 with high demand rate according to SN 31920 	73 %
B10 value with high demand rate according to SN 31920	1 000 000
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
ISO 13849	
device type according to ISO 13849-1	3
overdimensioning according to ISO 13849-2 necessary	Yes
IEC 61508	
safety device type according to IEC 61508-2	Type A
Electrical Safety	
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
Approvals Certificates	



General Product Approval







<u>KC</u>



EMV

Test Certificates

Marine / Shipping



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

Type Test Certificates/Test Report







Marine / Shipping

other

Railway







Miscellaneous

Confirmation

Special Test Certific-

Dangerous goods

Environment

Transport Information



Environmental Confirmations

Further information

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=3RT2027-1BW40

Cax online generator

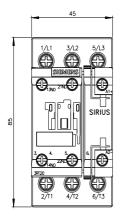
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2027-1BW40

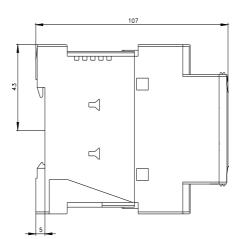
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

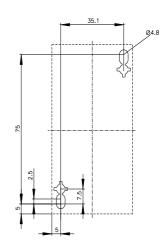
https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-1BW40

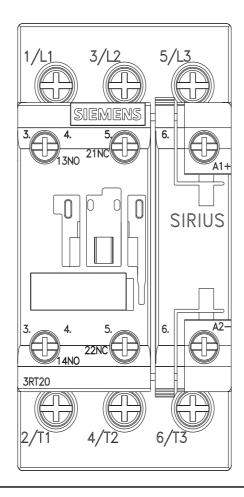
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

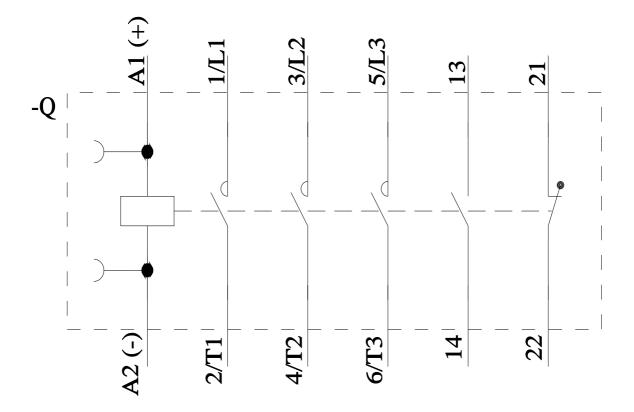
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2027-1BW40&objecttype=14&gridview=view1











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