SIEMENS

Data sheet

3RT2027-2AP04



power contactor, AC-3e/AC-3, 32 A, 15 kW / 400 V, 3-pole, 230 V AC, 50 Hz, auxiliary contacts: 2 NO + 2 NC, spring-loaded terminal, size: S0, removable auxiliary switch

nuclust burnel name	
product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	SO
product extension	
 function module for communication 	No
auxiliary switch	No
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 	2.5 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 AC	8,3g / 5 ms, 5,3g / 10 ms
shock resistance with sine pulse	
• at AC	13,5g / 5 ms, 8,3g / 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)	
Weight	0.508 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	74.2 kg
Global Warming Potential [CO2 eq] during manufacturing	1.9 kg
Global Warming Potential [CO2 eq] during operation	72.4 kg
Global Warming Potential [CO2 eq] after end of life	-0.117 kg
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
 at AC-3e rated value maximum 	690 V
operational current	
at AC-1 at 400 V at ambient temperature 40 °C rated value	50 A
 at AC-1 — up to 690 V at ambient temperature 40 °C rated 	50 A
value — up to 690 V at ambient temperature 60 °C rated	42 A
• at AC-3	
— at 400 V rated value	32 A
— at 500 V rated value	32 A
— at 690 V rated value	21 A
• at AC-3e	
— 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	20.0.4
— 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 up to 500 V for current peak value n=20 rated value 	30.8 A
 up to 500 V for current peak value n=20 rated value up to 600 V for current peak value n=20 rated value 	27 A 21 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 mm ²
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	
— at 24 V rated value	20 A
— at 60 V rated value	5 A
— at 220 V rated value	1A
— 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 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 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	
— 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	
— 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- 4	
• 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	
 limited 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
Imited to 30 s switching at zero current maximum	199 A; Use minimum cross-section acc. to AC-1 rated value
Imited to 60 s switching at zero current maximum	162 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	E 000 4/h
• at AC	5 000 1/h

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operating frequency	
• 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	AC
control supply voltage at AC	AC
	220.1/
at 50 Hz rated value	230 V
operating range factor control supply voltage rated value of magnet coil at AC	
• at 50 Hz	0.8 1.1
apparent pick-up power of magnet coil at AC	
• at 50 Hz	77 VA
inductive power factor with closing power of the coil	
	0.00
• at 50 Hz	0.82
apparent holding power of magnet coil at AC	0.01/4
• at 50 Hz	9.8 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.25
closing delay	
• at AC	8 40 ms
opening delay	
● at AC	4 16 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	2
contact	
number of NO contacts for auxiliary contacts instantaneous contact	2
operational current at AC-12 maximum	10 A
operational current at AC-15	
• at 230 V rated value	6 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	1A
at 600 V rated value	0.15 A
operational current at DC-13	
at 24 V rated value	6.4
	6 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	0 hr
	— at 110/120 V rated value	2 hp
		5 hp
- at 640480 Vindo value 28 hp contact rating of auxiliary contacts according to UL 28 h00 / 0600 Sinor-forcul protection - with type of accordination 1 required - with side-10 possible on vertical mounting surface; can be titled forward an backwards by - 42.25 for workical mounting surface; can be titled forward an backwards by - 42.25 for workical mounting surface; fastening method - forwards - forwards - downwards - downw		•
	— at 220/230 V rated value	
context rating of auxiliary contacts according to UL A800 / 0800 Short-circuit protection Gesign of the five link • for short-circuit protection of the main circuit • with type of coordinaton 1 required • or short-circuit protection of the auxiliary switch required • or short-circuit protection • or short-circuit protection • or short-circuit protection • or short-circuit protection • or short-circuit support-circuit short-circuit support-circuit short-circuit support-circuit support-circ	— at 460/480 V rated value	20 hp
Short-circuit protection design of the fues link for short-circuit protection of the main circuit with type of coordination 1 required gG: 125A (690V, 100KA), akt: 50A (690V, 100KA), BSBs: 50A (415V, 80KA) gG: 10 A (500 V, 10KA), akt: 50A (690V, 100KA), BSBs: 50A (415V, 80KA) gG: 10 A (500 V, 10KA), akt: 50A (690V, 100KA), BSBs: 50A (415V, 80KA) gG: 10 A (500 V, 11KA) Insufficient or mounting dimensions #-4180* rotation possible on vertical mounting surface; can be tilted forward an backward by +22.5* on vertical mounting surface; can be tilted forward an backward by +22.5* on vertical mounting surface; can be tilted forward an backward by +22.5* on vertical mounting surface; can be tilted forward an backward by +22.5* on vertical mounting surface; can be tilted forward an backward by +22.5* on vertical mounting surface; can be tilted forward an backward by +22.5* on vertical mounting surface; can be tilted forward an backward by +22.5* on vertical mounting surface; can be tilted forward an backward by +22.5* on vertical mounting surface; can be tilted forward an backward by +22.5* on vertical mounting surface; can be tilted forward an backward by +22.5* on vertical mounting surface; can be tilted forward an backward by +22.5* on vertical mounting surface; can be tilted forward an backward by +22.5* on vertical mounting surface; can be tilted forward an backward by +22.5* on vertical mounting surface; can be tilted forward an interval surface; can be tilted forward an inthe st	— at 575/600 V rated value	25 hp
design of the fuse link or short-circuit protection of the main circuit with type of conditation 1 required with type of consistent 1 required of short-circuit protection of the auxiliary switch required seew and shap-on mounting surface; can be tifted forward an backward by 4:22 of on vertical mounting surface; and be short of avertals of many <li< td=""><td>contact rating of auxiliary contacts according to UL</td><td>A600 / Q600</td></li<>	contact rating of auxiliary contacts according to UL	A600 / Q600
tor short-circuit protection of the main circuit — with type of coordination 1 required G: 126A (690V, 100kA), a.M. 25A (690V, 100kA), BSBB: 125A (415V, 80KA) G: 50A (690V, 100kA), a.M. 25A (690V, 100kA), BSBB: 126A (415V, 80KA) G: 50A (690V, 100kA), a.M. 25A (690V, 100kA), BSBB: 126A (415V, 80KA) G: 50A (690V, 100kA), a.M. 25A (690V, 100kA), BSBB: 126A (415V, 80KA) G: 50A (690V, 100kA), a.M. 25A (690V, 100kA), BSBB: 126A (415V, 80KA) G: 50A (690V, 100kA), a.M. 25A (690V, 100kA), BSBB: 126A (415V, 80KA) G: 50A (690V, 100kA), a.M. 25A (690V, 100kA), BSBB: 126A (415V, 80KA) G: 50A (690V, 100kA), a.M. 25A (690V, 100kA), BSBB: 126A (415V, 80KA) G: 50A (690V, 100kA), a.M. 25A (690V, 100kA), BSBB: 126A (415V, 80KA) G: 50A (690V, 100kA), a.M. 25A (690V, 100kA), BSBB: 126A (415V, 80KA) G: 50A (690V, 100kA), a.M. 25A (690V, 100kA), BSBB: 126A (415V, 80KA) G: 50A (690V, 100kA), a.M. 25A (690V, 100kA), BSBB: 126A (415V, 80KA) G: 50A (690V, 100kA), a.M. 25A (690V, 100kA), BSBB: 126A (415V, 80KA) G: 50A (690V, 100kA), a.M. 25A (690V, 100kA), BSBB: 126A (415V, 80KA) G: 50A (690V, 100kA), a.M. 25A (690V, 100kA), BSBB: 126A (415V, 80KA) G: 50A (690V, 100kA), a.M. 25A (690V, 100kA), BSBB: 126A (415V, 80KA) G: 50A (690V, 100kA), a.M. 25A (690V, 100kA), BSBB: 126A (415V, 80KA) Fistal attemption of the auxiliary and to attemption attempt	Short-circuit protection	
- with type of coordination 1 required - with type of assignment 2 required of as short-circuit protection of the auxiliary switch required of assignment 2 required of as	design of the fuse link	
- with type of assignment 2 required • for short circuit protection of the auxiliary switch required • for short circuit protection of the auxiliary switch required festion of the auxiliary switch required festion of the auxiliary switch required festion on vertical mounting surface: can be litted forward an backward by + 2.5° in vertical mounting surface: festion on vertical mounting surface: can be litted forward an backward by + 2.5° in vertical mounting surface: festion on vertical mounting surface: can be litted forward an backward by + 2.5° in vertical mounting surface: festion on vertical mounting surface: can be litted forward an backward by + 2.5° in vertical mounting to DIN EN 60715 height i of main control for auxiliary context i of main current forwards i	 for short-circuit protection of the main circuit 	
• for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) Installation/mounting/dimensions +/180° rotation possible on vertical mounting surface; can be tilled forward an backward by +/2.2.5° on vertical mounting surface; can be tilled forward an backward by +/2.2.5° on vertical mounting surface; can be tilled forward an backward by +/2.2.5° on vertical mounting surface; can be tilled forward an backward by +/2.2.5° on vertical mounting surface; can be tilled forward an backward by +/2.2.5° on vertical mounting surface; can be tilled forward an backward by +/2.2.5° on vertical mounting surface; can be tilled forward an backward by +/2.2.5° on vertical mounting surface; can be tilled forward an backward by +/2.2.5° on vertical mounting surface; can be tilled forward an backward by +/2.2.5° on vertical mounting surface; can be tilled forward an backward by +/2.2.5° on vertical mounting surface; can be tilled forward an backward by +/2.2.5° on vertical mounting surface; can be tilled forward an backward by +/2.2.5° on vertical mounting surface; can be tilled forward an backward by +/2.2.5° on vertical mounting surface; can be tilled forward an backward by +/2.2.5° on vertical mounting surface; can be tilled forward an backward by +/2.2.5° on vertical mounting surface; can be tilled forward an backward by +/2.2.5° on vertical mounting surface; can be tilled forward an backward by +/2.2.5° on vertical mounting surface; can be tilled forward an backward by +/2.2.5° on vertical mounting surface; can be tilled forward an backward by +/2.2.5° on vertical mounting surface; can be tilled forwards • of mark the subtle on outling 0 mm 0 mm • of provends 10 mm 0 mm • of or avalisery ontorb or could 5 pring-loaded te	 — with type of coordination 1 required 	gG: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A (415V,80kA)
Installation/ mounting/ dimensions +/-180° rotation possible on vertical mounting surface; can be titled forward an backward by +/-22.0° on vertical mounting surface; fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 height 102 mm witch 45 mm depth 144 mm required spacing 0 mm - forwards 10 mm - downwards 10 mm - downwards 10 mm - downwards 10 mm - at the side 0 mm - forwards 10 mm - at the side 0 mm - downwards 10 mm - at the side 0 mm - forwards 10 mm - at the side 6 mm - downwards 10 mm - at the side 6 mm Connections/ Terminals 5 pring-loaded terminals ype of electrical connection spring-loaded terminals - solid 2x (1 10 mm²) - solid 2x (1	 — with type of assignment 2 required 	gG: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA)
mounting position 4/187 rotation possible on vertical mounting surface: can be tilted forward an backward by 4/-22.5" on vertical mounting surface: fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 height 102 mm width 46 mm depth 144 mm required spacing 0 mm - drowards 10 mm - upwards 10 mm - drowards 10 mm - drowa	 for short-circuit protection of the auxiliary switch required 	gG: 10 A (500 V, 1 kA)
Backward by +/-2.2.5" on vertical mounting outs according to DIN Fail accord Fail according to DIN Fail according to DIN Fail accor	Installation/ mounting/ dimensions	
fastening method scew and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 height 102 mm width 45 mm depth 144 mm required spacing 0 mm - forwards 10 mm - upwards 10 mm - upwards 10 mm - downwards 10 mm - for live parts - - of advectical connection - - for advectical conadvectical conducto	mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and
height 102 mm width 45 mm depth 144 mm required spacing 144 mm • with side-by-side mounting - forwards - forwards 10 mm - upwards 10 mm - downwards 10 mm - at the side 6 mm - forwards 10 mm - at the side 6 mm - downwards 10 mm - at the side 6 mm - downwards 10 mm - downwards 5pring-loaded terminals spring-loaded terminals 5pring-loaded terminals • for main current circuit spring-loaded terminals <t< td=""><td></td><td>backward by +/- 22.5° on vertical mounting surface</td></t<>		backward by +/- 22.5° on vertical mounting surface
with 45 mm depth 144 mm required spacing 144 mm • with side-by-side mounting 0 mm - forwards 10 mm - downwards 10 mm - the side 0 mm - upwards 10 mm - upwards 10 mm - downwards 10 mm - for main current circuit spring-loaded terminals of or angle coll Spring-loaded terminals of magnet coll Spring-loaded terminals of magnet coll	fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
depth 144 mm required spacing • with side-by-side mounting - forwards 10 mm - upwards 10 mm - downwards 10 mm - upwards 10 mm - downwards 10 mm - solid spring-loaded terminals for auxiliary and control circuit spring-loaded terminals • for main current circuit spring-loaded terminals • of magnet coil Spring-type terminals type of connectable conductor cross-sections (- for main's) • for main curter circuit	height	102 mm
required spacing • with side-by-side mounting - forwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 10 mm - downwards 10 mm - at the side 0 mm - forwards 10 mm - upwards 10 mm - upwards 10 mm - at the side 6 mm - downwards 10 mm - downwards 10 mm - forwards 10 mm - downwards 10 mm - for auxiliary contactio spring-loaded terminals * for auxiliary contactios Spring-loaded terminals • of magnet coil Spring-lype terminals • of magnet coil Spring-lype terminals	width	45 mm
• with side-by-side mounting 0 mm - forwards 10 mm - upwards 10 mm - downwards 0 mm - at the side 0 mm - for grounded parts 0 mm - forwards 10 mm - upwards 10 mm - upwards 10 mm - upwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 10 mm - downwards 10 mm - upwards 10 mm - downwards 10 mm - for axiliary and control circuit spring-loaded terminals for axiliary and control circuit spring-loaded terminals i of or ania contracts Spring-type terminals i of or ania contracts Spring-type terminals i of or ania contracts Spring-type terminals i of magnet coll 2x (1 10 mm ²) i for avside wit	depth	144 mm
- forwards10 mm- upwards10 mm- downwards10 mm- downwards0 mm- at the side0 mm- forwards10 mm- upwards10 mm- upwards10 mm- at the side6 mm- downwards10 mm- upwards10 mm- for auxiliary contacts5 ming-loaded terminalsfor auxiliary and control circuitspring-loaded terminals• for main current circuitspring-loaded terminals• for auxiliary contactsSpring-type terminals• for main contactsSpring-type terminals• for main contacts2x (1 10 mm²)- esolid or stranded2x (1 10 mm²)- finely stranded with core end processing2x (1 6 mm²)• for MS cables for main contacts2x (1 6 mm²)• for MS cables for main contacts2x (1 6 mm²)• finely stranded with core end processing1 10 mm²• finely stranded without core end processing1 6 mm²• finely stranded wit	required spacing	
	 with side-by-side mounting 	
- downwards10 mm at the side0 mm• for grounded parts0 mm- forwards10 mm- upwards10 mm- at the side6 mm- at the side6 mm- at the side10 mm- downwards10 mm- for live parts forwards10 mm- downwards10 mm- downwards10 mm- downwards10 mm- downwards10 mm- downwards0 mm- downwards0 mm- downwards0 mm- downwards0 mm- downwards6 mmConnections/ Terminals* of main current circuitspring-loaded terminals• for auxiliary and control circuitspring-loaded terminals• of ormain current circuitspring-loaded terminals• of onaet callSpring-type terminals• of onaet callSpring-type terminals• of onaet callSpring-type terminals• of onaet callSpring-type terminals• of onaet call2x (1 10 mm ³)- inlely stranded with core end processing2x (1 10 mm ³)- inlely stranded with core end processing2x (1 6 mm ³)• solid1 10 mm ² • solid with core end processing1 10 mm ² • solid with core end processing1 10 mm ² • solid without core end processing1 10 mm ² • solid without core end processing1 10 mm ² • solid without core end processing1 6 m	— forwards	10 mm
at the side0 mm• for grounded parts10 mm forwards10 mm upwards00 mm at the side6 mm downwards10 mm downwards10 mm forwards10 mm forwards10 mm forwards10 mm upwards10 mm downwards10 mm downwards10 mm downwards10 mm downwards10 mm downwards10 mm downwards10 mm downwards5 mm downwards10 mm downwards10 mm downwards5 mm downwards10 mm downwards10 mm downwards5 mm downwards10 mm downwards10 mm adt side5 ming-loaded terminals for auxiliary contacts5 pring-loaded terminals for auxiliary contacts5 pring-loaded terminals solid5 pring-loaded terminals solid2x (1 10 mm²) solid or stranded2x (1 10 mm²) finely stranded with core end processing2x (1 6 mm²) finely stranded with core end processing2x (1 6 mm²) solid1 10 mm² solid1 10 mm² finely stranded with core end processing1 6 mm² solid1 6 mm² solid1 6 mm² finely stranded with core end processing1 6	— upwards	10 mm
• for grounded partsImage: consectable conductor cross-section for main contacts- forwards10 mm- downwards00 mm- downwards10 mm- downwards10 mm- forwards10 mm- forwards10 mm- upwards00 mm- downwards00 mm- downwards00 mm- at the side6 mmConnectables/ Terminals6 mmConnectable conductor cross-sectionsSpring-loaded terminals• of magnet coilSpring-loaded terminals• of or main contactsSpring-loaded terminals• of magnet coilSpring-loaded terminals• of magnet coilSpring-loaded terminals• of magnet coilSpring-loaded terminals• of magnet coilSpring-loaded terminals• of or main contactsSpring-loaded terminals• of or main contactsSpring-loaded terminals• of or main contactsSpring-loaded terminals• of AVG cables for main contactsSpring-loaded terminals• of AVG cables for main contactsSpring-loaded terminals• of magnet coilSpring-loaded terminals• of magnet coilSpring-loaded terminals• of magnet coilSpring-loaded terminals• of or main contactsSpring-loaded terminals• of or AVG cables for main contacts <td< td=""><td>— downwards</td><td>10 mm</td></td<>	— downwards	10 mm
-forwards10 mm-upwards10 mmat the side6 mm-at the side6 mm-downwards10 mm-forwards10 mm-forwards10 mm-upwards10 mm-upwards10 mm-downwards10 mm-downwards10 mm-downwards10 mm-downwards10 mm-downwards6 mmConnections/Terminalstype of electrical connection-spring-loaded terminalsof rauxiliary and control circuitspring-loaded terminalsof rauxiliary and control circuitspring-loaded terminalsof magnet coilSpring-type terminalstorinatic contactsSpring-type terminals-solid or stranded2x (1 10 mm²)-solid or stranded without core end processing2x (1 10 mm²)-finely stranded without core end processing2x (1 6 mm²)-finely stranded with core end processing2x (1 6 mm²)-solid1 10 mm²-solid with core end processing1 10 mm²-solid with core end processing1 6 mm²-solid with core end processing1 10 mm²-solid with core end processing1 6 mm²-finely stranded with core end processing1 6 mm²-innel stranded1 0 mm²	— at the side	0 mm
upwards10 mm at the side6 mm downwards10 mm downwards10 mm forwards10 mm forwards10 mm upwards10 mm upwards10 mm downwards0 mm downwards0 mm at the side6 mmConnections/ Terminalstype of electrical connection for main current circuitspring-loaded terminals- for main current circuitspring-loaded terminals- for main current circuitspring-loaded terminals- for auxiliary and control circuitspring-loaded terminals- for main current circuitspring-loaded terminals- for for main current circuitspring-loaded terminals- for for main contactsSpring-type terminals- solid2x (1 10 mm²)- solid or stranded2x (1 10 mm²)- finely stranded with core end processing2x (1 6 mm²)- for AWG cables for main contacts2x (1 6 mm²)- solid1 10 mm²- solid1 10 mm²- solid1 10 mm²- solid1 0 mm²- finely stranded with core end processing1 6 mm²- solid1 10 mm²- solid1 10 mm²- finely stranded with core end processing1 6 mm²- finely stranded with core end processing1 6 mm²- finely stranded with core end processing1 6 mm²- finely stranded with core end processing<	 for grounded parts 	
at the side6 mm downwards10 mm downwards10 mm forwards10 mm upwards10 mm upwards10 mm downwards0 mm downwards6 mm at the side6 mmConnections/ TerminalsSpring-loaded terminals<	— forwards	10 mm
downwards10 mm• for live parts forwards10 mm- upwards10 mm- upwards00 mm- at the side6 mmConnections/ Terminalstype of electrical connection• for main current circuitspring-loaded terminals• for main control circuitspring-loaded terminals• for main control circuitspring-loaded terminals• for main control circuitspring-loaded terminals• for main contactsSpring-type terminals• for main contactsSpring-type terminals• for main contactsSpring-type terminals• for main contactsSpring-type terminals• for main contacts2x (1 10 mm²)- solid2x (1 10 mm²)- finely stranded with core end processing2x (1 6 mm²)• for AWG cables for main contacts2x (1 6 mm²)• solid1 10 mm²• solid1 10 mm²• finely stranded with core end processing1 6 mm²• finely stranded with	— upwards	10 mm
• for live parts 10 mm - forwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 10 mm - at the side 6 mm Connections/ Terminals type of electrical connection • for main current circuit spring-loaded terminals • for auxiliary and control circuit spring-loaded terminals • for auxiliary and control circuit spring-loaded terminals • at contactor for auxiliary contacts Spring-type terminals • of magnet coil Spring-type terminals type of connectable conductor cross-sections - solid • for stranded 2x (1 10 mm²) - solid other core end processing 2x (1 6 mm²) - finely stranded with core end processing 2x (1 6 mm²) • for AWG cables for main contacts 2x (18 8) connectable conductor cross-section for main contacts 2x (18 8) connectable conductor cross-section for main contacts 10 mm² • solid 1 10 mm² • stranded 1 10 mm² • finely stranded with core end processing 1 6 mm² <td>— at the side</td> <td>6 mm</td>	— at the side	6 mm
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- downwards10 mm- at the side6 mmConnections/ Terminalstype of electrical connection• for main current circuitspring-loaded terminals• for auxiliary and control circuitspring-loaded terminals• at contactor for auxiliary contactsSpring-type terminals• of magnet collSpring-type terminals• of main contactsspring-type terminals• for auxiliary contactsSpring-type terminals• for AWG cables for main contactsSpring-type terminals• finely stranded with core end processing1 10 mm²• finely stranded with core end processing1 6 mm²• finely stranded without core end processing	— upwards	10 mm
at the side 6 mm Connections/Terminals type of electrical connection • for main current circuit spring-loaded terminals • for auxiliary and control circuit spring-loaded terminals • at contactor for auxiliary contacts Spring-type terminals • of magnet coil Spring-type terminals type of connectable conductor cross-sections • • for main contacts - - solid 2x (1 10 mm²) - solid or stranded 2x (1 10 mm²) - finely stranded with core end processing 2x (1 6 mm²) - finely stranded with core end processing 2x (1 6 mm²) • solid 1 10 mm² • solid 1 10 mm² • solid 1 10 mm² • finely stranded with core end processing 2x (1 6 mm²) • solid 1 10 mm² • solid 1 10 mm² • stranded 1 10 mm² • finely stranded with core end processing 1 6 mm² • finely stranded with core end processing 1 6 mm² • finely stranded with core end processing 1 6 mm² • finely stranded without cor		
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— finely stranded without core end processing $2x (1 6 mm^2)$ • for AWG cables for main contacts $2x (188)$ connectable conductor cross-section for main contacts $110 mm^2$ • solid $110 mm^2$ • stranded $110 mm^2$ • finely stranded with core end processing $16 mm^2$ • finely stranded without core end processing $16 mm^2$ • connectable conductor cross-section for auxiliary contacts $16 mm^2$		
• for AWG cables for main contacts 2x (18 8) connectable conductor cross-section for main contacts - • solid 1 10 mm² • stranded 1 10 mm² • finely stranded with core end processing 1 6 mm² • finely stranded without core end processing 1 6 mm² • connectable conductor cross-section for auxiliary contacts -		
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finely stranded without core end processing 1 6 mm ² connectable conductor cross-section for auxiliary contacts		
connectable conductor cross-section for auxiliary contacts	 finely stranded with core end processing 	
	 finely stranded without core end processing 	1 6 mm²
	connectable conductor cross-section for auxiliary contacts	
• solid or stranded 0.5 2.5 mm ²	 solid or stranded 	0.5 2.5 mm²
• finely stranded with core end processing 0.5 1.5 mm ²	 finely stranded with core end processing 	0.5 1.5 mm²
• finely stranded without core end processing 0.5 2.5 mm ²	 finely stranded without core end processing 	0.5 2.5 mm²
type of connectable conductor cross-sections	type of connectable conductor cross-sections	
for auxiliary contacts	 for auxiliary contacts 	

 — solid or stra 	Inded		2x (0.5 .	2.5 mm²)		
	ded with core end proces	ssing		1.5 mm²)		
-	ded without core end pro	÷		2x (0.5 2.5 mm ²)		
-	for auxiliary contacts		2x (20			
	d connectable conduct	tor cross		.,		
 for main contacts 	3		18 8			
 for auxiliary containing 	acts		20 14			
Safety related data						
product function						
•	cording to IEC 60947-4-	1	Yes			
	operation according to IE		No			
 suitable for safety 			Yes			
suitability for use safety	-		Yes			
service life maximum	Telated Switching Of T		20 a			
test wear-related servi	ico lifo nocossany		Yes			
proportion of dangero	-		163			
		020	40.9/			
	rate according to SN 31		40 %			
	d rate according to SN 3		73 %			
	emand rate according t		1 000 00	0		
failure rate [FIT] with l 31920	ow demand rate accord	ding to SN	100 FIT			
ISO 13849						
device type according	to ISO 13849-1		3			
	cording to ISO 13849-2	000000000	Yes			
IEC 61508	ording to 130 13649-2	necessary	165			
	anding to IEC 04500.2		Turne A			
safety device type acc			Туре А			
Electrical Safety	the formation of the second large to		1000			
-	the front according to		IP20			
-	ne front according to IE	C 60529	finger-sa	afe, for vertical contact	t from the front	
Approvals Certificates						
General Product Appr	roval					
	loval					
					-	KC
(m)	Confirmation	UK		"	Ē	KC
		UK	-	C€	(h)	KC
		UK CA		CE EG-Konf.	(U) u	KC
		UK CA	Ì	C E EG-Konf.	(U) UL	KC
CCC	<u>Confirmation</u>	CA		C E EG-Konf.	UL	
CCC General Product Approval		UK CA Functional Safe		EG-Konf.	UL	KC Marine / Shipping
CCC General Product Approval	<u>Confirmation</u>	CA Functional Safe	itey T	Special Test Certific-	UL UL Type Test Certific- ates/Test Report	
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CCC General Product Approval	<u>Confirmation</u>	CA Functional Safe	itey T	Special Test Certific-		
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CCC General Product Approval	<u>Confirmation</u>	CA Functional Safe	itey T	Special Test Certific-		
CCC General Product Approval	<u>Confirmation</u>	CA Functional Safe	itey T	Special Test Certific-		Marine / Shipping
CCC General Product Approval	<u>Confirmation</u>	CA Functional Safe	itey T	Special Test Certific-		Marine / Shipping
CCC General Product Approval	Confirmation EMV EMV ECM	CA Functional Safe	itey T	Special Test Certific- ate	ates/Test Report	Marine / Shipping
CCC General Product Approval CERC Marine / Shipping	<u>Confirmation</u>	CA Functional Safe	itey T	Special Test Certific-		Marine / Shipping
CCC General Product Approval	Confirmation EMV EMV ECM	CA Functional Safe	itey T	Special Test Certific- ate	ates/Test Report	Marine / Shipping
CCC General Product Approval CERC Marine / Shipping	Confirmation EMV EMV ECM	CA Functional Safe	itey 1	Special Test Certific- ate	ates/Test Report	Marine / Shipping
CCC General Product Approval CERC Marine / Shipping Marine / Shipping	Confirmation EMV Confirmation	CA Functional Safe Type Examination tificate	itey 1 in Cer- 5	Special Test Certific- ate	ates/Test Report	Marine / Shipping
Ccc General Product Approval CEAC Marine / Shipping	Confirmation EMV EMV ECM	CA Functional Safe Type Examination tificate Final Safe Type Examination tificate Final Safe	itey 1 in Cer- 5	Special Test Certific- ate	ates/Test Report	Marine / Shipping
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CCC General Product Approval CERC Marine / Shipping Marine / Shipping	Confirmation EMV Confirmation	CA Functional Safe Type Examination tificate Final Safe Type Examination tificate	itey 1 in Cer- 5	Special Test Certific- ate	ates/Test Report	Marine / Shipping
CCC General Product Approval CERC Marine / Shipping Marine / Shipping	Confirmation EMV Confirmation	CA Functional Safe Type Examination tificate Final Safe Type Examination tificate	itey 1 in Cer- 5	Special Test Certific- ate	ates/Test Report	Marine / Shipping
CCC General Product Approval CERC Marine / Shipping Marine / Shipping	Confirmation EMV Confirmation	CA Functional Safe Type Examination tificate Final Safe Type Examination tificate	itey 1 in Cer- 5	Special Test Certific- ate	ates/Test Report	Marine / Shipping

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=3RT2027-2AP04 Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2027-2AP04 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT2027 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

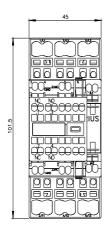
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2027-2AP04&lang=en

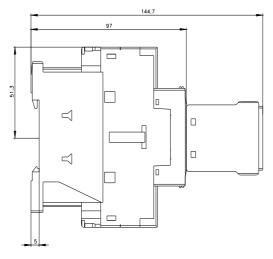
Characteristic: Tripping characteristics, I2t, Let-through current

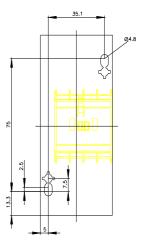
https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-2AP04/char

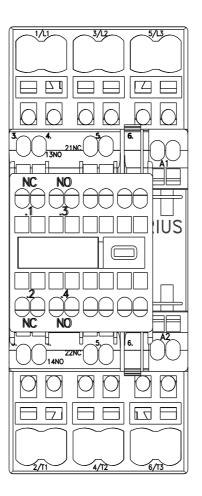
Further characteristics (e.g. electrical endurance, switching frequency)

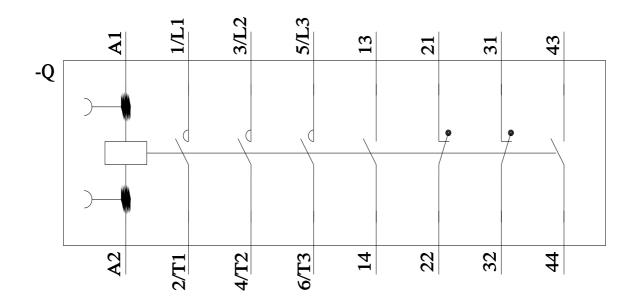
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2027-2AP04&objecttype=14&gridview=view1











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