SIEMENS

Data sheet 3RT2027-2AB00



power contactor, AC-3e/AC-3, 32 A, 15 kW / 400 V, 3-pole, 24 V AC, 50 Hz, auxiliary contacts: 1 NO + 1 NC, spring-loaded 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 	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	0.459 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	o. Tri Ng
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 value	50 A
— up to 690 V at ambient temperature 60 °C rated value	42 A
at AC-3 — at 400 V rated value	32 A
— at 400 V rated value — 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	
— 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 valueat 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	40.4
at 400 V rated value at 600 V rated value	12 A
at 690 V rated value operational current	12 A
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	1A
— 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
	1.4 A
at 1 current path at DC-3 at DC-5 at 24 V reted value.	20 A
— at 24 V rated value	5 A
— at 60 V rated value — at 220 V rated value	
	1 A
— 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	0F 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 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-	
at 400 V rated value	6 kW
at 400 V rated value at 690 V rated value	10.3 kW
operating apparent power at AC-6a	10.0 ((1)
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 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 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 up to 690 V for current peak value n=20 rated value	25.8 KVA
operating apparent power at AC-6a	20 (())
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 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 up to 500 V for current peak value n=30 rated value	15.5 kVA
up to 500 V for current peak value n=30 rated value 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	210 1071
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
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	
• at AC	5 000 1/h
at ∧∪	0 000 mil

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	
at 50 Hz rated value	24 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	
● at 50 Hz	0.82
apparent holding power of magnet coil at AC	
● 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	1
contact	
number of NO contacts for auxiliary contacts instantaneous contact	1
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 at 600 V rated value	27 A
yielded mechanical performance [hp]	
granda moonamoar periormanoe [mp]	
for single-phase AC motor	

- of 2002 of Viralet value		
Forwards 10 mm 1	— at 110/120 V rated value	2 hp
al 200200 V rated value al 400480 V rated value 20 hp al 575000 V rated value 20 hp		5 hp
	• for 3-phase AC motor	
at 4504490 V rated value	— at 200/208 V rated value	10 hp
	 at 220/230 V rated value 	10 hp
	— at 460/480 V rated value	20 hp
Short-circult protection Heavier	— at 575/600 V rated value	25 hp
design of the fuse link	contact rating of auxiliary contacts according to UL	A600 / P600
• for short-circuit protection of the main circuit — with type of coordination 1 required — with type of coordination 1 required — with type of assignment 2 required 95: SDA (600V,100kA), abl; SDA (690V, 100kA), BSSB: 125A (415V,80kA) 95: SDA (600V,100kA), abl; SDA (690V, 100kA), BSSB: SDA (415V,80kA) 95: SDA (600V,100kA), abl; SDA (690V,100kA), BSSB: SDA (415V,80kA) 95: SDA (600V,100kA), abl; SDA (690V,100kA), BSSB: SDA (415V,80kA) 95: SDA (600V,100kA), abl; SDA (690V,100kA), BSSB: SDA (415V,80kA) 95: SDA (600V,100kA), abl; SDA (690V,100kA), BSSB: SDA (415V,80kA) 95: SDA (600V,100kA), abl; SDA (690V,100kA), BSSB: SDA (415V,80kA) 95: SDA (600V,100kA), abl; SDA (690V,100kA), BSSB: SDA (415V,80kA) 95: SDA (600V,100kA), abl; SDA (690V,100kA), BSSB: SDA (415V,80kA) 95: SDA (600V,100kA), abl; SDA (690V,100kA), BSSB: SDA (415V,80kA) 95: SDA (600V,100kA), abl; SDA (690V,100kA), BSSB: SDA (415V,80kA) 95: SDA (600V,100kA), abl; SDA (690V,100kA), BSSB: SDA (415V,80kA) 95: SDA (600V,100kA), abl; SDA (690V,100kA), BSSB: SDA (415V,80kA) 95: SDA (600V,100kA), abl; SDA (690V,100kA), BSSB: SDA (415V,80kA) 95: SDA (600V,100kA), abl; SDA (600V,100kA	Short-circuit protection	
	design of the fuse link	
— with type of assignment 2 required • for short-cruzit protection of the auxiliary switch required installation install	 for short-circuit protection of the main circuit 	
Note short-circuit protection of the auxiliary switch required installation/mounting) dimensions	 — with type of coordination 1 required 	gG: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A (415V,80kA)
Instalation/ mounting dimensions mounting position	— with type of assignment 2 required	gG: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA)
# # # # # # # # # #	• for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)
Sackward by +/- 22.5" on vertical mounting surface Sate Sackward by +/- 22.5" on vertical mounting surface Sate Same	Installation/ mounting/ dimensions	
Assenting method	mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and
height width		backward by +/- 22.5° on vertical mounting surface
width 45 mm depth 97 mm required spacing 97 mm with side-by-side mounting 10 mm — forwards 10 mm — upwards 10 mm — of or grounded parts 10 mm — forwards 10 mm — upwards 10 mm — downwards 10 mm — of view parts 10 mm — forwards 10 mm — upwards 10 mm — forwards 10 mm — downwards 10 mm • for main current circuit spring-loaded terminals type of electrical connection spring-loaded terminals • for auxiliary and control circuit spring-loaded terminals • for main cortacts spring-loaded terminals • of magnet coil 2x (1 10 mm²) type of co	fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
depth 97 mm required spacing required spacing • with side-by-side mounting 10 mm — forwards 10 mm — downwards 0 mm — at the side 0 mm • for grounded parts 10 mm — upwards 10 mm — at the side 6 mm — downwards 10 mm • for live parts 10 mm — downwards 10 mm — upwards 10 mm — downwards 10 mm — at the side 6 mm Connections/ Torminals 10 mm * for main current circuit spring-loaded terminals • for main current circuit spring-loaded terminals • for main contacts Spring-type terminals • for main contacts Spring-type terminals • for main contacts 2x (1 10 mm²) — solid or stranded 2x (1 10 mm²) • for AWG cables for main contacts 2x (1 6 mm²) • for ply stranded without core end processing 1 10 mm² • finely stranded without core end proces	height	102 mm
required spacing with side-by-side mounting	width	45 mm
with side-by-side mounting — forwards — upwards — downwards — downwards — at the side • for grounded parts — forwards — upwards — forwards — upwards — the side — downwards — downwards — to fill upwards — forwards — upwards — to mm — downwards — upwards — to mm — downwards — to mm — for main current circuit — for main current circuit — of main current	depth	97 mm
forwards upwards upward	required spacing	
- upwards	 with side-by-side mounting 	
- downwards - at the side 0 mm - at the side 10 mm - forgrounded parts 10 mm - upwards 10 mm - at the side 6 mm - at the side 6 mm - at the side 6 mm - forwards 10 mm - for live parts 10 mm - downwards 10 mm - downwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 10 mm - at the side 6 mm Connections/ Torminals type of electrical connection	— forwards	10 mm
■ at the side • for grounded parts — forwards — upwards — at the side — downwards — to live parts — forwards — upwards — to live parts — forwards — upwards — to many and the side — downwards — to many and the side — downwards — upwards — upwards — to many and the side — downwards — downwards — to many and the side — for many and control circuit — at contactor for auxiliary contacts — of magnet coil type of electrical connection — for main current circuit — at contactor for auxiliary contacts — solid — at contactor for auxiliary contacts — solid — solid or stranded — finely stranded with core end processing — finely stranded without core end processing — finely stranded without core end processing — finely stranded with core end processing — finely stranded without core end processing — finely stranded with core end processing — finely stra	— upwards	10 mm
• for grounded parts — forwards — upwards — at the side — downwards • for live parts — forwards — upwards — for live parts — forwards — upwards — downwards — dom m — downwards — at the side — for main current circuit — for main current circuit — so 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 AWG cables for main contacts — solid — stranded — finely stranded with core end processing — finely strande	— downwards	10 mm
- forwards	— at the side	0 mm
- upwards - at the side - downwards 10 mm • for live parts - forwards 10 mm - upwards 10 mm - upwards 10 mm - upwards 10 mm - downwards 10 mm - at the side 6 mm Connections/ Torminals type of electrical connection • for main current circuit • at contactor for auxiliary contacts • of magnet coil - solid - solid or stranded - finely stranded with core end processing • finely stranded with core end processing	 for grounded parts 	
at the side — downwards • for live parts • for live parts — forwards — upwards — upwards — downwards — at the side — downwards — at the side — formal cornection — at the side Connections/Terminals type of electrical connection • for awailiary and control circuit • at contactor for auxiliary contacts • of magnet coil spring-loaded terminals • of magnet coil Spring-type terminals • of magnet coil type of connectable conductor cross-sections • for main cornacts — solid — solid or stranded — finely stranded with core end processing — finely stranded without 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	— 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 circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts - solid - solid or stranded - finely stranded without core end processing • for AWG cables for main contacts • solid • stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • stranded • finely stranded without core end processing • stranded • finely stranded without core end processing • stranded • finely stranded without core end processing • stranded • finely stranded without core end processing • stranded • finely stranded without core end processing • finely stranded without core end processing • stranded • finely stranded without core end processing	— upwards	10 mm
• for live parts — forwards — upwards — downwards — at the side — at the side Connections/ Terminals type of electrical connection • for main current circuit • at contactor for auxiliary contacts • of magnet coil - solid — solid or stranded — finely stranded with core end processing • finely stranded without core end processing • finely stranded with core end processing • finely stranded without core end processing	— at the side	6 mm
- forwards	— downwards	10 mm
- upwards	• for live parts	
- downwards - at the side 6 mm Connections/ Terminals type of electrical connection • for main current circuit spring-loaded terminals • at contactor for auxiliary contacts • of magnet coil Spring-type terminals • of magnet coil Spring-type terminals • of magnet coil Spring-type terminals • of magnet coil Spring-type terminals • of magnet coil Spring-type terminals • solid 2x (1 10 mm²) - solid 2x (1 10 mm²) - finely stranded with core end processing 2x (1 6 mm²) • for AWG cables for main contacts 2x (1 6 mm²) • for AWG cables for main contacts 2x (1 10 mm² • finely stranded with core end processing 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 • finely stranded without core end processing 1 6 mm² • finely stranded without core end processing 0.5 2.5 mm² • finely stranded with core end processing 0.5 2.5 mm² • finely stranded with core end processing 0.5 2.5 mm² • finely stranded with core end processing 0.5 2.5 mm² • finely stranded with core end processing 0.5 2.5 mm²	— forwards	10 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 • of magnet coil Spring-type terminals • of main contacts • for main contacts - solid - solid 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 processing • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded with core end processing	— upwards	10 mm
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 • of magnet coil Spring-type terminals • for main contacts • solid 2x (1 10 mm²) — solid or stranded — solid or stranded with core end processing 2x (1 6 mm²) — finely stranded without core end processing 2x (1 6 mm²) • 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 • stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded • finely stranded • finely stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing	— downwards	10 mm
type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts — solid — 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 processing • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded without core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing	— at the side	6 mm
 for main current circuit for auxiliary and control circuit at contactor for auxiliary contacts of magnet coil Spring-type terminals of magnet coil Spring-type terminals type of connectable conductor cross-sections for main contacts – solid – solid or stranded – finely stranded with core end processing – finely stranded without core end processing for AWG cables for main contacts solid 1 10 mm² stranded finely stranded with core end processing finely stranded with core end processing stranded finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing finely stranded without core end processing finely stranded with core end processing osolid or stranded finely stranded with core end processing finely stranded without cor	Connections/ Terminals	
for auxiliary and control circuit at contactor for auxiliary contacts of magnet coil Spring-type terminals of magnet coil Spring-type terminals for main contacts osolid - solid - solid or stranded - finely stranded with core end processing of for AWG cables for main contacts onectable conductor cross-section for main contacts onectable conductor cross-section for main contacts olid of finely stranded with core end processing of finely stranded with core end processing of or AWG cables for main contacts onectable conductor cross-section for main contacts onectable conductor cross-section for main contacts of finely stranded with core end processing of finely stranded without core end processing of finely stranded without core end processing of finely stranded with core end processing of finely stranded without core end processing of connectable conductor cross-sections	type of electrical connection	
 at contactor for auxiliary contacts of magnet coil Spring-type terminals type of connectable conductor cross-sections for main contacts — solid — solid or stranded — finely stranded with core end processing — finely stranded without core end processing of or AWG cables for main contacts e solid osolid osolid or stranded osolid or stranded without core end processing osolid or stranded osolid or stranded with core end processing osolid or stranded with core end pro	for main current circuit	spring-loaded terminals
• of magnet coil type of connectable conductor cross-sections • for main contacts - solid - solid 2x (1 10 mm²) - solid or stranded - finely stranded with core end processing • for AWG cables for main contacts • solid • stranded • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded with core end processing • finely stranded without core end processing	for auxiliary and control circuit	spring-loaded terminals
• of magnet coil 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 • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded with core end processing • finely stranded without core end processing	at contactor for auxiliary contacts	Spring-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 • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • solid • stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded • finely stranded with core end processing • finely stranded without core end processing	of magnet coil	Spring-type terminals
- solid	type of connectable conductor cross-sections	
- solid or stranded - finely stranded with core end processing - finely stranded without 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 • finely stranded without core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded conductor cross-sections	• for main contacts	
finely stranded with core end processing finely stranded without core end processing • for AWG cables for main contacts • solid • stranded • stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded without 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 • finely stranded with core end processing • finely stranded with core end processing • finely stranded without core end processing • finely stranded conductor cross-sections	— solid	2x (1 10 mm²)
finely stranded with core end processing finely stranded without core end processing • for AWG cables for main contacts • solid • stranded • stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing • finely stranded with core end processing • finely stranded without core end processing • solid or stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded conductor cross-sections	— solid or stranded	2x (1 10 mm²)
 — finely stranded without core end processing ● for AWG cables for main contacts ○ solid ● stranded ● finely stranded with core end processing ● finely stranded without core end processing ● finely stranded without core end processing ● finely stranded without core end processing O.5 2.5 mm² ● finely stranded without core end processing ● finely stranded with core end processing O.5 2.5 mm² ● finely stranded without core end processing ● finely stranded without core end processing O.5 2.5 mm² ● finely stranded without core end processing O.5 2.5 mm² 	 finely stranded with core end processing 	2x (1 6 mm²)
 for AWG cables for main contacts connectable conductor cross-section for main contacts solid stranded finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing 6 mm² connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing finely connectable conductor cross-sections 		
connectable conductor cross-section for main contacts • solid • stranded • finely stranded with core end processing • finely stranded without core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing 0.5 2.5 mm² • finely stranded without core end processing • finely stranded without core end processing • finely stranded without core end processing • finely connectable conductor cross-sections		
 stranded finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing 2.5 mm² finely connectable conductor cross-sections 	connectable conductor cross-section for main contacts	
 stranded finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing 2.5 mm² type of connectable conductor cross-sections 	• solid	1 10 mm²
 finely stranded without core end processing connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing 2.5 mm² finely stranded without core end processing 2.5 mm² 	• stranded	1 10 mm²
 finely stranded without core end processing connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing 2.5 mm² finely stranded without core end processing 2.5 mm² 	 finely stranded with core end processing 	1 6 mm²
connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing • finely stranded without core end processing • finely stranded without core end processing type of connectable conductor cross-sections 0.5 2.5 mm² 0.5 2.5 mm²		1 6 mm²
 solid or stranded finely stranded with core end processing finely stranded without core end processing finely stranded without core end processing type of connectable conductor cross-sections 		
 finely stranded with core end processing finely stranded without core end processing type of connectable conductor cross-sections 	-	0.5 2.5 mm ²
• finely stranded without core end processing type of connectable conductor cross-sections 0.5 2.5 mm²		
type of connectable conductor cross-sections		
	• for auxiliary contacts	

 solid or stranded 	2x (0.5 2.5 mm²)
 finely stranded with core end processing 	2x (0.5 1.5 mm²)
 finely stranded without core end processing 	2x (0.5 2.5 mm²)
 for AWG cables for auxiliary contacts 	2x (20 14)
AWG number as coded connectable conductor cross section	
• for main contacts	18 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



Confirmation







<u>KC</u>

General Product Approval

EMV

Functional Saftey

Test Certificates

Marine / Shipping





Type Examination Certificate Special Test Certificate

Type Test Certificates/Test Report



Marine / Shipping











Miscellaneous

other

other

Railway

Environment

Confirmation

Confirmation

Special Test Certificate



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=3RT2027-2AB00

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2027-2AB00

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-2AB00

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

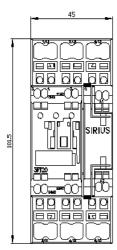
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2027-2AB00&lang=en

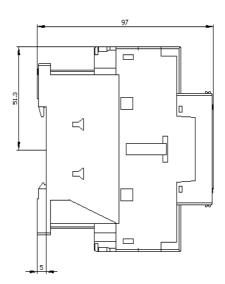
Characteristic: Tripping characteristics, I^2t , Let-through current

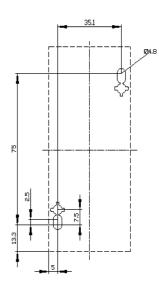
https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-2AB00/char

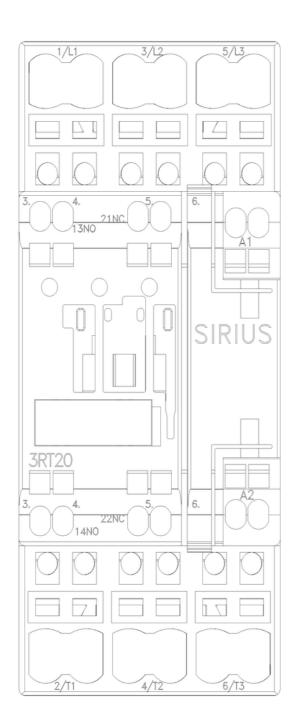
Further characteristics (e.g. electrical endurance, switching frequency)

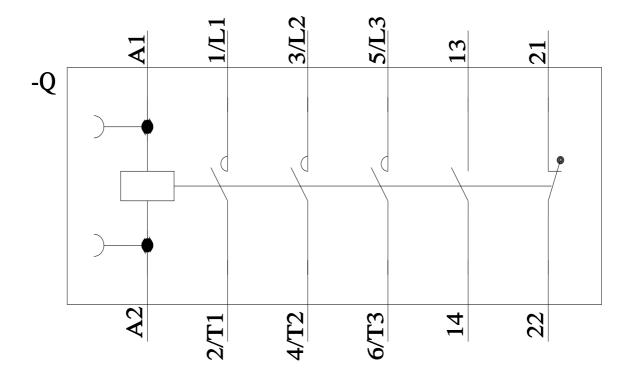
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2027-2AB00&objecttype=14&gridview=view1











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