SIEMENS

Data sheet 3RT2027-1BG40



power contactor, AC-3e/AC-3, 32 A, 15 kW / 400 V, 3-pole, 125 V DC, auxiliary contacts: 1 NO + 1 NC, screw terminal

product brand name	SIRIUS	
product designation	Power contactor	
product type designation	3RT2	
General technical data		
size of contactor	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	
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 safe isolation 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	
Ambient conditions		
installation altitude at height above sea level maximum	2 000 m	
ambient temperature		
during operation	-25 +60 °C	
during storage	-55 +80 °C	
relative humidity minimum	10 %	
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %	
Main circuit		

number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	ŭ
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 at AC-3 	42 A
— 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	
— 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 minimum cross-section in main circuit at maximum AC-1	18 A 10 mm²
rated value 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 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 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	05.4
— at 24 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

1000 // / / /	
— 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 110 V rated value	2.5 A
— 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 	
— at 24 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 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-2 at 400 V rated value	15 kW
• 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	
Iimited to 1 s switching at zero current maximum	499 A; Use minimum cross-section acc. to AC-1 rated value
Ilmited to 1's switching at zero current maximum Imited to 5 s switching at zero current maximum	341 A; Use minimum cross-section acc. to AC-1 rated value
limited to 3 s switching at zero current maximum limited to 10 s switching at zero current maximum	260 A; Use minimum cross-section acc. to AC-1 rated value
limited to 70 s switching at zero current maximum limited to 30 s switching at zero current maximum	199 A; Use minimum cross-section acc. to AC-1 rated value
Ilmitted to 50's switching at zero current maximum Ilmitted 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 DC	1 500 1/h
operating frequency	. 555 .///
• at AC-1 maximum	1 000 1/h
• at AC-2 maximum	750 1/h
• at AC-3 maximum	750 1/h
at AC-3 maximum	750 1/h
at AC-3e maximum at AC-4 maximum	250 1/h
Control circuit/ Control	
	DC
type of voltage of the control supply voltage	DC
control supply voltage at DC • rated value	125 V
→ lateu value	120 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	TO 4TO
• 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	1
instantaneous contact	
number of NO contacts for auxiliary contacts	1
instantaneous contact	10 A
operational current at AC-12 maximum	10 A
operational current at AC-15	10.4
at 230 V rated value at 400 V rated value	10 A
at 400 V rated value	3 A
at 500 V rated value at 600 V rated value	2 A
• at 690 V rated value	1 A
operational current at DC-12	40.4
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	40.4
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
• for 3-phase AC motor	40.1
— at 200/208 V rated value	10 hp
— at 220/230 V rated value	10 hp
— at 460/480 V rated value	20 hp
— at 575/600 V rated value	25 hp
contact rating of auxiliary contacts according to UL	A600 / P600
Short-circuit protection	
design of the fuse link	
 for short-circuit protection of the main circuit 	
 — with type of coordination 1 required 	gG: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A
	(415V,80kA)
 — with type of assignment 2 required 	gG: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (415V,
• for short circuit protection of the cuvilians quitely	80kA)
 for short-circuit protection of the auxiliary switch required 	gG: 10 A (500 V, 1 kA)
Installation/ mounting/ dimensions	
motandion/ mounting/ difficusions	

### standing method * add-dy-side mounting * add-dy-side mounting * with add-dy-side mounting * with add-by-side mounting * of prounded parts * for grounded parts * for main current circuit * of on with add by-side mounting * on many standed with core and processing * all AVC callables for main condacts * solid * all for auxiliary contacts * solid * finely stranded with core and processing * onnectable conductor cross-section for auxiliary contacts * solid or stranded * finely stranded with core and processing * onnectable conductor cross-section for auxiliary contacts * solid or stranded * finely stranded with core and processing * yoo of connectable conductor cross-section for auxiliary contacts * solid or stranded * finely stranded with core and processing * yoo of connectable conductor cross-section for auxiliary contacts * solid or stranded * finely stranded with core and processing * on for auxiliary contacts * solid or stranded * finely stranded with core and processing * for auxiliary contacts * solid or stranded * finely stranded with core and processing * on for auxiliary contacts * solid or stranded * finely stranded with core and processing * of auxiliary contacts * solid or stranded * finely stranded with core and processing * on for auxiliary contacts * solid or stranded * finely stranded with core and processing * of auxiliary contacts	mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted
* side by-side mounting	fastening method	
Bight width 45 mm 107 mm		
with depth 107 mm required spacing • with side-by-side mounting — forwards 10 mm — at the side 0 mm — at the side 6 mm — upwards 10 mm — at the side 6 mm — downwards 10 mm — at the side 6 mm — downwards 10 mm — at the side 6 mm — downwards 10 mm — at the side 6 mm — downwards 10 mm — at the side 6 mm — downwards 10 mm — at the side 6 mm — forwards 10 mm — at the side 6 mm — for want or the side 6 mm — downwards 10 mm — at the side 6 mm — for main contact 5 mm — at the side 7 mm — at the side 7 mm — to remain cornection 10 mm — to remain cornect incurt 10 mm — to remain cornect 10 mm — to r	,	
required spacing - with side-by-side mounting - forwards - upwards - at the side - for grounded parts - forwards - upwards - at the side - downwards - of man and and a secording to SN 31920 - solid or stranded - for main contacts - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - 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 - owner-table conductor cross-section for auxiliary contacts - solid or stranded - finely stranded with core end processing - or auxiliary contacts - solid or stranded - finely stranded with core end processing - or auxiliary contacts - solid or stranded - finely stranded with core end processing - or auxiliary contacts - solid or stranded - finely stranded with core end processing - or auxiliary contacts - solid or stranded - finely stranded with core end processing - or auxiliary contacts - solid or stranded - finely stranded with core end processing - or auxiliary contacts - solid or stranded - finely stranded with core end processing - or auxiliary contacts - solid or stranded - finely stranded with core end processing - or auxiliary contacts - solid or stranded - finely stranded with core end processing - or auxiliary contacts - solid or stranded - finely stranded with core end processing - or auxiliary contacts - solid or stranded - finely stranded with core end processing - or auxiliary contacts - solid or stranded - fi	•	
required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side — for grounded parts — forwards — upwards — on mm — at the side — on mm — at the side — upwards — upwards — upwards — upwards — upwards — to mm — at the side — downwards — on mm — downwards — to mm — upwards — to make a conductor consultance — to make a conductor cross-section • for main current circuit — at the side — on mm — upwards — to mm — upwards — downwards — to mm — upwards — downwards — to mm — the side — downwards — to mm — upwards — downwards — to mm — to mm — to mm — the side — downwards — to mm — the side — s		
• with side-by-side mounting — lupwards — upwards — at the side • for grounded parts — forwards — at the side • for grounded parts — forwards — at the side • for man contexts — upwards — at the side — downwards • for live parts — forwards — upwards — forwards — upwards — forwards — upwards — forwards — upwards — for man — forwards — upwards — upw	•	107 mm
- Forwards		
upwards at the side of the side	, ,	40
- at the side • for grounded parts - forwards - upwards - at the side • for grounded parts - upwards - at the side - downwards • for live parts - forwards - downwards • for live parts - forwards - upwards - upwards - upwards - upwards - downwards - upwards - downwards - upwards - downwards - at the side - forwards - upwards - downwards - at the side - forwards - upwards - downwards - upwards - downwards - downwards - at the side - forwards - upwards - downwards - downwa		
at the side - for grounded parts torwards upwards at the side downwards forwards downwards downwards downwards at the side downwards at the side formal content circuit for auxiliary and control circuit for auxiliary and control circuit for fine and control circuit solid or stranded finely stranded with core end processing	•	
• for grounded parts — forwards — upwards — at the side — downwards • for live parts — orwards — upwards — upwards — upwards — upwards — upwards — upwards — downwards — downwards — downwards — the side — downwards — of many and current circuit • of a rauxillary and control circuit • at contactor for auxillary contacts • of main current circuit • at contactor for auxillary contacts • of many to connectable conductor cross-sections • for main contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts • solid • stranded • finely stranded with core end processing • for auxillary contacts • solid • stranded • finely stranded with core end processing • for auxillary contacts — solid or stranded — finely stranded with core end processing • for for auxillary contacts — solid or stranded — finely stranded with core end processing • for fauxillary contacts — solid or stranded — finely stranded with core end processing • for fauxillary contacts — solid or stranded — finely stranded with core end processing • for fauxillary contacts — solid or stranded — finely stranded with core end processing • for fauxillary contacts — solid or stranded — finely stranded with core end processing • for fauxillary contacts — solid or stranded — finely stranded with core end processing • for fauxillary contacts — solid or stranded — finely stranded with core end processing • for fauxillary contacts — solid or stranded — finely stranded with core end processing • for fauxillary contacts — solid or stranded — finely stranded with core end processing • for fauxillary contacts — solid or stranded — finely stranded with core end processing • for fauxillary contacts - solid or stranded — finely stranded with core end processing • for fauxillary contacts - solid or stranded — finely stranded with core end processing • for fauxillary contacts - solid or stranded — finely stranded with core end processing • for fauxillary contacts - solid or stranded — finely stranded with core end processi		
- forwards - upwards - at the side - downwards - for live pards - forwards - forwards - forwards - forwards - upwards - forwards - upwards - forwards - upwards - downwards - for forwards - downwards - downwards - for main current circuit - for auxiliary and control circuit - for auxiliary and control circuit - for auxiliary and control circuit - for for auxiliary contacts - solid - solid or stranded - solid or stranded - minely stranded with core end processing - solid - sinely stranded with core end processing - solid - sinely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid		0 mm
upwards		
- at the side - downwards in live parts - (nowards		
• for live parts - forwards - upwards - upwards - downwards - do	•	
• for live parts — forwards — upwards — downwards — at the side Connections/ Terminals Type of electrical connection • for main current circuit • for auxiliary and control circuit • for auxiliary and control circuit • for auxiliary and control circuit • 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 • at AWG cables for main contacts • solid • stranded • finely stranded with core end processing connectable conductor cross-section for main contacts • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • at AWG cables for auxiliary contacts — solid or stranded • finely stranded with core end processing • at AWG cables 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 • at AWG cables for auxiliary contacts — solid or stranded • finely stranded with core end processing • for auxiliary contacts — solid or stranded • finely stranded with core end processing • at AWG cables for auxiliary contacts — solid or stranded • finely stranded with core end processing • at AWG cables for auxiliary contacts — solid or stranded • finely stranded with core end processing • at AWG cables for auxiliary contacts — solid or		
- forwards - upwards - upwards - downwards - downwards - at the side Connections/ Terminals type of electrical connection • for main current circuit • at contactor for auxiliary contacts • of main current circuit - solid - solid or stranded - finely stranded with core end processing connectable conductor cross-section for auxiliary 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 connectable conductor cross-section for auxiliary contacts • solid or stranded - finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded - finely stranded with core end processing connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end pr		10 mm
- upwards - downwards - at the side Connections/ Torminals type of electrical connection • for main current circuit • for auxiliary and control circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts - solid - solid or stranded - finely stranded with core end processing • at AWG cables for main contacts • solid • finely stranded with core end processing connectable conductor cross-section for main contacts • solid • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-sections • for auxiliary contacts - solid or stranded • finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded • finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded • finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded • finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded • finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded • finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded • finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded • finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded • finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded • finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded • finely stranded with core end processing • at AWG cables for auxiliary contacts - solid or stranded • finely stra	•	
- downwards — at the side 6 nm 6 nm 6 nm 6 nm Connections Terminals type of electrical connection • for main current circuit screw-type terminals • at contactor for auxiliary contacts connectable conductor cross-sections • for main contacts consider consid		
- at the side Connections/ Torninals 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 • at 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 • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for main contacts • for main contacts • for auxiliary contacts AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts • for main contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • for main contacts • for auxiliary contacts • for auxiliary conta	•	
type of electrical connection • for main current 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 • at AWG cables for main contacts • solid • stranded • finely stranded with core end processing • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • for exiliary 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 • to for auxiliary contacts — solid or stranded — finely stranded with core end processing • to for auxiliary contacts — solid or stranded — finely stranded with core end processing • to for auxiliary contacts — solid or stranded — finely stranded with core end processing • to for auxiliary contacts • for or defined according to IEC 60947-4-1 B10 value with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 • wi		
type of electrical connection • for main current 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 • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • for auxiliary contacts • fo	— at the side	6 mm
• 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 • at AWG cables for main contacts • solid • stranded • finely stranded with core end processing 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 tonnectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts 4 WG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts 4 WG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts 4 WG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts 4 WG number as coded connectable conductor cross-section for main contacts • for main contacts • for auxiliary contacts 4 WG number as code	Connections/ Terminals	
• for auxillary and control circuit • at contactor for auxillary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts — solid — solid or stranded — finely stranded with core end processing connectable conductor cross-section for main contacts • solid • sit and with core end processing • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • 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 • at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts Poduct function • mirror contact according to IEC 60947-4-1 B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 at later for proof test interval or service life according to SN 31920 T1 value for proof test interval or service life according to SN 31920 T1 value for proof test interval or service life according to SN 31920 T1 value for proof test interval or service life according to SN 31920 T1 value for proof test interval or service life according to SN 31920	type of electrical connection	
at contactor for auxiliary contacts of magnet coil Screw-type terminals For main contacts - solid - solid or stranded - finely stranded with core end processing at AWG cables for main contacts - solid - solid - solid - solid - finely stranded with core end processing at AWG cables for main contacts - solid - stranded - finely stranded with core end processing connectable conductor cross-section for main contacts - solid - stranded - finely stranded with core end processing connectable conductor cross-section for auxiliary contacts - solid - 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 solid or stranded - finely stranded with core end processing - star WG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing - at AWG cables for auxiliary contacts - for main contacts - for main contacts - for main contacts - for main contacts - for main contacts - for main contacts - for main contacts - for main contacts - with low demand rate according to SN 31920 proportion of dangerous failures - with low demand rate according to SN 31920 - with high demand rate according to SN 31920 - with high demand rate according to SN 31920 - with high demand rate according to SN 31920 - TV value for proof test interval or service life according to - for proof test interval or service life according to - for proof test interval or service life according to - for proof test interval or service life according to - for proof test interval or service life according to - for proof test interval or service life according to - for proof test interval or service life according to - for proof test interval or service life according to - for proof test interval or service life according to - for proof test interval or service life according to - for proof test interval or service life according to - for proof test interval or service life according to - for proof	for main current circuit	screw-type terminals
of magnet coil type of connectable conductor cross-sections	 for auxiliary and control circuit 	screw-type terminals
• for main contacts - solid - solid or stranded - finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing • stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing • at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts 2x (1 2.5 mm²), 2x (2.5 10 mm²) 1 10 mm² 1 10 mm² 2 10 mm² 2 2.5 mm² 2 x (0.5 2.5 mm² 2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm² 2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm² 2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm² 2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm² 2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm² 2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm² 2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm² 2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm² 2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm² 2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm² 2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm² 2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm² 2 x (0.5 1.5 mm²), 2x (0.75 2.5 mm² 2 x (0	at contactor for auxiliary contacts	Screw-type terminals
• for main contacts — solid — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts	of magnet coil	Screw-type terminals
- solid - solid or stranded - finely stranded with core end processing • at AWG cables for main contacts 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 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 type of connectable conductor cross-sections • 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 type of connectable conductor cross-sections • 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 type of connectable conductor cross-sections • 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 type of connectable conductor cross-sections • 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 type of connectable conductor cross-sections • 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 - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core	type of connectable conductor cross-sections	
- solid or stranded - finely stranded with core end processing at AWG cables for main contacts connectable conductor cross-section for main contacts stranded stranded stranded stranded stranded situation situation situation situation situation situation stranded situation situation situation situation situation situation situation situation stranded situation situa	for main contacts	
- finely stranded with core end processing • at AWG cables for main contacts connectable conductor cross-section for main contacts • solid • stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid of stranded • finely stranded with core end processing 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 - solid or stranded - solid or stranded with core end processing • at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts Safety related data product function • mirror contact according to IEC 60947-4-1 B10 value with high demand rate according to SN 31920 • with low demand rate according to SN 31920 • with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to 2x (1 2.5 mm², 2x (2.5 6 mm²), 1x 10 mm² 2x (16 12), 2x (14 8) 1 10 mm² 1 10 mm² 2	— solid	2x (1 2.5 mm²), 2x (2.5 10 mm²)
- finely stranded with core end processing • at AWG cables for main contacts connectable conductor cross-section for main contacts • solid • stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid of stranded • finely stranded with core end processing 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 - solid or stranded - solid or stranded with core end processing • at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts Safety related data product function • mirror contact according to IEC 60947-4-1 B10 value with high demand rate according to SN 31920 • with low demand rate according to SN 31920 • with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to 2x (1 2.5 mm², 2x (2.5 6 mm²), 1x 10 mm² 2x (16 12), 2x (14 8) 1 10 mm² 1 10 mm² 2	 solid or stranded 	2x (1 2.5 mm²), 2x (2.5 10 mm²)
at AWG cables for main contacts connectable conductor cross-section for main contacts	 finely stranded with core end processing 	
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 connectable conductor cross-sections • 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 • at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts •	at AWG cables for main contacts	
 stranded finely stranded with core end processing 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 a solid or stranded b for auxiliary contacts c finely stranded with core end processing d finely stranded with core end processing e at AWG cables for auxiliary contacts at AWG number as coded connectable conductor cross section for main contacts for auxiliary contac		
 finely stranded with core end processing connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts solid or stranded finely stranded with core end processing at AWG cables for auxiliary contacts at AWG cables for auxiliary contacts at AWG number as coded connectable conductor cross section for main contacts for auxiliary contacts mirror contact according to IEC 60947-4-1 B10 value with high demand rate according to SN 31920 proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to 20 y 	• 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 • at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts 16 8 • for auxiliary contacts 20 14 Safety related data product function • mirror contact according to IEC 60947-4-1 B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to 0.5 2.5 mm² 0	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 • at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts 16 8 • for auxiliary contacts 20 14 Safety related data product function • mirror contact according to IEC 60947-4-1 B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to 0.5 2.5 mm² 0.	 finely stranded with core end processing 	1 10 mm²
• finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts • for auxil	connectable conductor cross-section for auxiliary	
• finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts 16 8 • for auxiliary contacts 16 8 • for auxiliary contacts 17 yes B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 T1 value for proof test interval or service life according to 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) 2x (20 16), 2	 solid or stranded 	0.5 2.5 mm ²
type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts 16 8 • for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) Safety related data product function • mirror contact according to IEC 60947-4-1 B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 if aliure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) Yes 450 14 Yes 450 15 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) Yes 450 14 Yes 450 15 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) Yes 16 8 450 14 Yes 17 value for proof test interval or service life according to 20 y	 finely stranded with core end processing 	
• for auxiliary contacts — solid or stranded — finely stranded with core end processing • at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts Safety related data product function • mirror contact according to IEC 60947-4-1 B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) 2x (20 16), 2x (18 14) Yes 40 8 450 000 450 000 73 % 6ailure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to 20 y		
- solid or stranded - finely stranded with core end processing - at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section - for main contacts - for auxiliary contacts Safety related data product function - mirror contact according to IEC 60947-4-1 B10 value with high demand rate according to SN 31920 proportion of dangerous failures - with low demand rate according to SN 31920 - with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to 20 y	2.	
 — finely stranded with core end processing at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section for main contacts for auxiliary contacts for auxiliary contacts for auxiliary contacts for auxiliary contacts a for auxiliary contacts for auxiliary contact	•	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 at AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section for main contacts for auxiliary contacts for auxiliary contacts 20 14 Safety related data product function mirror contact according to IEC 60947-4-1 B10 value with high demand rate according to SN 31920 proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to 20 y 		
AWG number as coded connectable conductor cross section • for main contacts • for auxiliary contacts 20 14 Safety related data product function • mirror contact according to IEC 60947-4-1 B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to 20 y		
 for auxiliary contacts Safety related data product function mirror contact according to IEC 60947-4-1 B10 value with high demand rate according to SN 31920 proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to 20 y 	AWG number as coded connectable conductor cross	
product function • mirror contact according to IEC 60947-4-1 B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to 20 y	• for main contacts	16 8
product function • mirror contact according to IEC 60947-4-1 B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to 20 y	 for auxiliary contacts 	20 14
product function • mirror contact according to IEC 60947-4-1 B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to 20 y	-	
 mirror contact according to IEC 60947-4-1 B10 value with high demand rate according to SN 31920 proportion of dangerous failures with low demand rate according to SN 31920 with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to 20 y 		
B10 value with high demand rate according to SN 31920 proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to 20 y	•	Yes
proportion of dangerous failures • with low demand rate according to SN 31920 • with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to 20 y		
 with low demand rate according to SN 31920 with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to 20 y 		TOO 000
 with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to 20 y 		40 %
failure rate [FIT] with low demand rate according to SN 31920 T1 value for proof test interval or service life according to 20 y		
31920 T1 value for proof test interval or service life according to 20 y		
T1 value for proof test interval or service life according to 20 y		100111
	T1 value for proof test interval or service life according to	20 y

protection class IP on the front according to IEC 60529

touch protection on the front according to IEC 60529 suitability for use

• safety-related switching OFF

IP20

finger-safe, for vertical contact from the front

Yes

Certificates/ approvals

General Product Approval





Confirmation



<u>KC</u>



EMC	Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates



Type Examination Certificate





Type Test Certificates/Test Report

Special Test Certificate

Marine / Shipping













other

Railway

Dangerous Good

Environmental Confirmations Confirmation



Vibration and Shock

<u>Transport Information</u>

Further information

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=3RT2027-1BG40

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2027-1BG40

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-1BG40

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

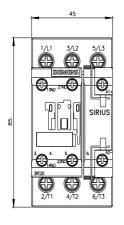
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2027-1BG40&lang=en

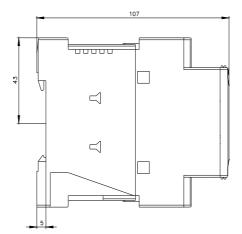
 $\label{lem:characteristic:} \textbf{Characteristic: Tripping characteristics, } \ \textbf{I}^{2}\textbf{t, Let-through current}$

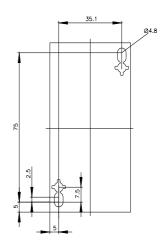
https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-1BG40/char

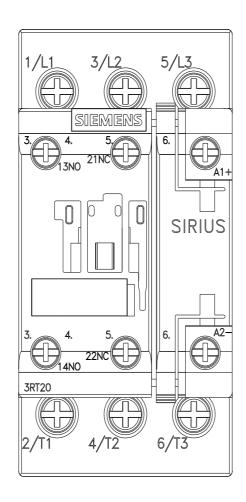
Further characteristics (e.g. electrical endurance, switching frequency)

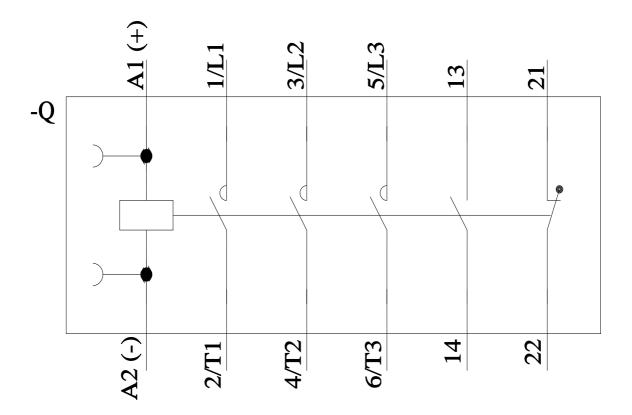
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2027-1BG40&objecttype=14&gridview=view1











last modified: 11/21/2022 🖸