SIEMENS

Data sheet 3RT2027-1AM20



power contactor, AC-3e/AC-3, 32 A, 15 kW / 400 V, 3-pole, 208 V AC, 50/60 Hz, auxiliary contacts: 1 NO + 1 NC, screw terminal, size: S0 $\,$

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S0
product extension	
 function module for communication 	No
auxiliary switch	Yes
power loss [W] for rated value of the current	
 at AC in hot operating state 	6.3 W
 at AC in hot operating state per pole 	2.3 W
 without load current share typical 	10.5 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 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)	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	05.0/
	95 %
Main circuit	95 %

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 	50 A
value	
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated	50 A
value	40 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 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
	21 A
— at 690 V rated value● at AC-4 at 400 V rated value	22 A
	44 A
at AC-5a up to 690 V rated value	
at AC-5b up to 400 V rated value	26.5 A
• at AC-6a	00.0 A
— 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	21 A
• at AC-6a	
 up to 230 V for current peak value n=30 rated value 	20.5 A
 up to 400 V for current peak value n=30 rated value 	20.5 A
 up to 500 V for current peak value n=30 rated value 	18 A
 up to 690 V for current peak value n=30 rated value 	18 A
minimum cross-section in main circuit at maximum AC-1 rated value	10 mm²
operational current for approx. 200000 operating cycles at	
AC-4	
• at 400 V rated value	12 A
• at 690 V rated value	12 A
operational current	
at 1 current path at DC-1	
— at 24 V rated value	35 A
— at 60 V rated value	20 A
— at 110 V rated value	4.5 A
— at 220 V rated value	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	1A
— at 600 V rated value	0.8 A
with 3 current paths in series at DC-1 at 24 V rated value.	25 A
— 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	20.4
— at 24 V rated value	20 A
— at 60 V rated value	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 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-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	
 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
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	208 V
at 60 Hz rated value	208 V
operating range factor control supply voltage rated value of magnet coil at AC	
● at 50 Hz	0.8 1.1
• at 60 Hz	0.85 1.1
apparent pick-up power of magnet coil at AC	
• at 50 Hz	81 VA
• at 60 Hz	79 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.72
• at 60 Hz	0.74
apparent holding power of magnet coil at AC	
• at 50 Hz	10.5 VA
• at 60 Hz	8.5 VA
inductive power factor with the holding power of the coil	
● at 50 Hz	0.25
● at 60 Hz	0.28
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 contact	1
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	27 A
yielded mechanical performance [hp]	
 for single-phase AC motor 	
— at 110/120 V rated value	2 hp

at 220 V roted value 5 hp 10 h		
	— at 230 V rated value	5 hp
	•	
		10 hp
	— at 220/230 V rated value	10 hp
contact rating of auxiliary contacts according to U. About circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of assignment 2 required — with type of assignment and auxiliary switch required maturalization incounting of dimensions **Interview of the auxiliary switch required flastoning method **Interview of the auxiliary switch required **Interview of the auxiliary contacts **Inter	— at 460/480 V rated value	
Short-circuit protection design of the fuse Ink		25 hp
design of the fuse link * for short-circuit protection of the main circuit		A600 / P600
• for short-sircult protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required — side-by-side mounting dimensions mounting position ### According to the standard of the audilary switch required ### According to the standard of the sta	Short-circuit protection	
	design of the fuse link	
	 for short-circuit protection of the main circuit 	
of cristnet-sircult protection of the auxiliary switch required mounting position	 — with type of coordination 1 required 	gG: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A (415V,80kA)
mounting position Fastening method solid-by-side mounting yes solid-by-side mounting width depth required spacing - with side-by-side mounting - forwards - upwards - downwards - at the side - downwards - of hor sudilary and control circuit - of awards - at the side - downwards - of mounting - forwards - of mounting - own wards - of mounting - own wards - own wards - ownwards	 — with type of assignment 2 required 	gG: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA)
wouthing position	• for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)
backward by +/- 2.2 f° on vertical mounting surface satic-by-side mounting width 45 mm depth 97 mm required spacing - with side-by-side mounting - forwards 10 mm - downwards 10 mm - forwards 10 mm - when side 10 mm - forwards 10 mm - forwards 10 mm - when side 10 mm - forwards 10 mm - when side 10 mm - forwards 10 mm - forwards 10 mm - for live parts 10 mm - for live parts 10 mm - for sive parts 10 mm - downwards 10 mm - for sive parts 10 mm - for sive parts 10 mm - for sive parts 10 mm - for main current circuit 20 mm - downwards 10 mm - for main current circuit 30 mm - for suxiliary and control circuit 30 screw-type terminals 30 screw-type terminal	Installation/ mounting/ dimensions	
Neight S5 mm S5 mm	mounting position	
height width 45 mm depth 97 mm required spacing • with side-by-side mounting - forwards 10 mm - downwards 10 mm - downwards 10 mm • for grounded parts - for grounded parts - forwards 10 mm - at the side 0 mm - at the side 10 mm - at the side 10 mm - for live parts - forwards 10 mm • for live parts - forwards 10 mm • for live parts - forwards 10 mm • for main current direcuit screw-type terminals - at the side 6 mm Connections/ Terminals Type of electrical connection • for main current direcuit screw-type terminals screw-type terminals Screw-type terminals type of connectable conductor cross-section for main contacts • solid • 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-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-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for AWG cables for auxiliary contacts • solid or stranded • fine	fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
width depth 97 mm required spacing with side-by-side mounting - forwards - downwards - downwards - of grounded parls - forwards - of grounded parls - of grounded g	side-by-side mounting	Yes
depth required spacing with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — 10 mm — of rowards — upwards — 10 mm — upwards — 10 mm — upwards — 10 mm — of rowards — 10 mm — of rive parts — forwards — 10 mm — of rowards — upwards — 10 mm — of rowards — 10 mm — ownwards — 10 mm — ownwards — 10 mm — of rive parts — forwards — at the side — of main current circuit — of rowards — at the side — ownwards — 10 mm — ownwards — 10 mm — ownwards —	height	85 mm
required spacing with side-by-side mounting	width	45 mm
with side-by-side mounting — forwards — upwards — downwards — at the side — for grounded parts — forwards — upwards — upwards — upwards — upwards — upwards — at the side — downwards — upwards — at the side — downwards — for mm — downwards — forwards — forwards — forwards — forwards — forwards — upwards — forwards — upwards — upwards — forwards — upwards — upwards — upwards — forwards — upwards — upwards — upwards — for man current circuit — of or an in current circuit — of or an in current circuit — of or axixiliary and control circuit — at the side — of man current circuit — of or axixiliary and control circuit — of or axixiliary and control circuit — solid or stranded — solid or stranded — solid or stranded — sinely stranded with core end processing — solid or stranded — solid	depth	97 mm
- forwards 10 mm 1	required spacing	
- upwards	 with side-by-side mounting 	
- downwards - at the side	— forwards	10 mm
- at the side • for grounded parts - forwards - upwards - at the side - downwards • for live parts - forwards - upwards - forwards - forwards - forwards - for live parts - forwards - upwards - downwards - for main current circuit • for main current circuit • for auxiliary and control circuit • for auxiliary and control circuit • 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 • 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 • stranded • 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 • finely stranded with core end processing • for auxiliary contacts - solid or stranded • finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - solid or stranded - solid or stranded - s	— upwards	10 mm
• for grounded parts — forwards — upwards — at the side — downwards 10 mm • for live parts — forwards 10 mm • for live parts — upwards 10 mm — upwards 10 mm — upwards 10 mm — upwards — upwards — upwards — downwards — downwards — the side — mm Connections/ Torminals type of electrical connection • 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 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 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 • for auxiliary contacts - solid or stranded • finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross	— downwards	10 mm
- forwards	— at the side	0 mm
- upwards - at the side - downwards - for live parts - forwards - upwards - upwards - upwards - upwards - downwards - at the side - formactions/Terminals Type of electrical connection - for main current circuit - for auxiliary and control circuit - at contactor for auxiliary contacts - of magnet coil - of magnet coil - solid - solid or stranded - finely stranded with core end processing - finely stranded with core end processing - finely stranded with core end processing - solid or stranded - finely stranded with	 for grounded parts 	
- at the side — downwards 10 mm • for live parts - forwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 5 10 mm - downwards 6 mm - at the side 6 mm Connections/ Terminals type of electrical connection • for main current circuit screw-type terminals • at contactor for auxiliary contacts • of magnet coil Screw-type terminals • of or anythap of connectable conductor cross-sections for main contacts • solid • solid or stranded 2x (1 2.5 mm²), 2x (2.5 10 mm²) • sinely stranded with core end processing 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² connectable conductor cross-section for main contacts • solid 1 10 mm² • finely stranded with core end processing 1 10 mm² connectable conductor cross-section for auxiliary contacts • solid 5 2.5 mm² • finely stranded with core end processing 1 10 mm² connectable conductor cross-section for auxiliary contacts • solid 0 stranded 0.5 2.5 mm² • finely stranded with core end processing 1 10 mm² connectable conductor cross-section for auxiliary contacts • solid or stranded 0.5 2.5 mm² • finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) - finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) - finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) - finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) - for awyliary contacts - solid or stranded 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) - for awyliary contacts - solid or stranded 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) - for awyliary contacts - for awyliary c	— forwards	10 mm
- downwards • for live parts - forwards - upwards - downwards - at the side Connections/ Terminals type of electrical connection • for main current circuit • at connectable conductor cross-section for main contacts • solid • finely stranded with core end processing • for awxiliary contacts • solid or stranded • finely stranded with core end processing • for awxiliary contacts • solid or stranded • finely stranded with core end processing • for awxiliary contacts • solid or stranded • finely stranded with core end processing • for awxiliary contacts • solid or stranded • finely stranded with core end processing • for awxiliary contacts • solid or stranded • finely stranded with core end processing • for awxiliary contacts • solid or stranded • finely stranded with core end processing • for awxiliary contacts • solid or stranded • finely stranded with core end processing • for awxiliary contacts • for awxilia	— upwards	10 mm
• for live parts — forwards — upwards — downwards — at the side 6 mm Connections/ Terminals type of electrical connection • 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 auxiliary contacts • solid • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts	— at the side	6 mm
- forwards - upwards - downwards - downwards - at the side Connections/ Terminals type of electrical connection • for awiliary and control 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 • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid • finely stranded with core end processing • 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 • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - for AWG cables for auxiliary contacts	— downwards	10 mm
- upwards - downwards - at the side Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections for main contacts • solid • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for onnectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross	• for live parts	
- downwards - at the side Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • solid • solid or stranded • finely stranded with core end processing • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross	— forwards	10 mm
- at the side 6 mm Connections/ Terminals type of electrical connection	— upwards	10 mm
type of electrical connection • for main current circuit • 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 • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxillary contacts • solid • stranded • finely stranded with core end processing connectable conductor cross-section for auxillary contacts • solid • stranded • finely stranded with core end processing connectable conductor cross-section for auxillary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxillary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxillary contacts — solid or stranded — finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) - finely stranded with core end processing • for AWG cables for auxillary contacts AWG number as coded connectable conductor cross	— 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 • solid • stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • for auxiliary contacts • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • for AWG cables for auxiliary contacts 2x (20.5 1.5 mm²), 2x (0.75 2.5 mm²) • for AWG number as coded connectable conductor cross	— 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 stranded stranded with core end processing stranded with core end processing solid or stranded with core end processing solid or stranded finely stranded with core end processing solid or stranded finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts a solid or stranded for auxiliary contacts for auxiliary contacts a solid or stranded for auxiliary contacts for AWG cables for auxiliary contacts a (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) AWG number as coded connectable conductor cross	Connections/ Terminals	
 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 solid tynumber of connectable conductor cross-section for main contacts solid 2x (1 2.5 mm²), 2x (2.5 10 mm²) finely stranded with core end processing tynumber of connectable conductor cross-section for main contacts solid 1 10 mm² stranded 1 10 mm² finely stranded with core end processing 1 10 mm² connectable conductor cross-section for auxiliary contacts solid or stranded 0.5 2.5 mm² finely stranded with core end processing 0.5 2.5 mm² type of connectable conductor cross-sections for auxiliary contacts solid or stranded 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) for AWG cables for auxiliary contacts 2x (20 16), 2x (18 14) AWG number as coded connectable conductor cross 	type of electrical connection	
 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 solid 2x (1 2.5 mm²), 2x (2.5 10 mm²) finely stranded with core end processing connectable conductor cross-section for main contacts solid stranded finely stranded with core end processing to mm² to mm² finely stranded with core end processing to mm² to mm²	• for main current circuit	screw-type terminals
of magnet coil type of connectable conductor cross-sections for main contacts • solid	 for auxiliary and control circuit 	screw-type terminals
type of connectable conductor cross-sections for main contacts • solid • solid or stranded • solid or stranded with core end processing connectable conductor cross-section for main contacts • solid • stranded • 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 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 • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross	 at contactor for auxiliary contacts 	Screw-type terminals
 solid 2x (1 2.5 mm²), 2x (2.5 10 mm²) solid or stranded finely stranded with core end processing 2x (1 2.5 mm²), 2x (2.5 10 mm²) finely stranded with core end processing 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² connectable conductor cross-section for main contacts solid stranded finely stranded with core end processing 1 10 mm² 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 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) for AWG cables for auxiliary contacts for AWG cables for auxiliary contacts 2x (20 16), 2x (18 14) AWG number as coded connectable conductor cross	of magnet coil	Screw-type terminals
 solid or stranded finely stranded with core end processing 2x (1 2.5 mm²), 2x (2.5 10 mm²) connectable conductor cross-section for main contacts solid stranded finely stranded with core end processing connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing finely stranded with core end processing finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts solid or stranded for auxiliary contacts finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) for AWG cables for auxiliary contacts for AWG number as coded connectable conductor cross 	type of connectable conductor cross-sections for main contacts	
 finely stranded with core end processing 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm² connectable conductor cross-section for main contacts solid stranded finely stranded with core end processing 1 10 mm² finely stranded with core end processing solid or stranded finely stranded with core end processing finely stranded with core end processing for auxiliary contacts solid or stranded for auxiliary contacts for auxiliary contacts for auxiliary contacts finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) for AWG cables for auxiliary contacts 2x (20 16), 2x (18 14) AWG number as coded connectable conductor cross	• solid	2x (1 2.5 mm²), 2x (2.5 10 mm²)
connectable conductor cross-section for main contacts • solid • stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded 2x (0.5 2.5 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) - finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) - for AWG cables for auxiliary contacts 2x (20 16), 2x (18 14)	 solid or stranded 	2x (1 2.5 mm²), 2x (2.5 10 mm²)
 solid stranded 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 for auxiliary contacts for auxiliary contacts finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) for AWG cables for auxiliary contacts for AWG cables for auxiliary contacts 2x (20 16), 2x (18 14) AWG number as coded connectable conductor cross	 finely stranded with core end processing 	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
 stranded finely stranded with core end processing connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing for auxiliary contacts solid or stranded for auxiliary contacts solid or stranded for auxiliary contacts for auxiliary contacts finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) for AWG cables for auxiliary contacts for AWG cables for auxiliary contacts 2x (20 16), 2x (18 14) AWG number as coded connectable conductor cross	connectable conductor cross-section for main contacts	
 ● 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 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) — finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) • for AWG cables for auxiliary contacts 2x (20 16), 2x (18 14) AWG number as coded connectable conductor cross	• 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 — solid or stranded — finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 4x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	• stranded	1 10 mm²
 solid or stranded finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts solid or stranded finely stranded with core end processing for AWG cables for auxiliary contacts for AWG cables for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) AWG number as coded connectable conductor cross	 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 → for AWG cables for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) AWG number as coded connectable conductor cross	connectable conductor cross-section for auxiliary contacts	
type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross	 solid or stranded 	0.5 2.5 mm²
 for auxiliary contacts — solid or stranded — finely stranded with core end processing for AWG cables for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) AWG number as coded connectable conductor cross	 finely stranded with core end processing 	0.5 2.5 mm²
 — solid or stranded — finely stranded with core end processing ● for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) 	type of connectable conductor cross-sections	
— finely stranded with core end processing of or AWG cables for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) AWG number as coded connectable conductor cross	• for auxiliary contacts	
• for AWG cables for auxiliary contacts 2x (20 16), 2x (18 14) AWG number as coded connectable conductor cross	— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
• for AWG cables for auxiliary contacts 2x (20 16), 2x (18 14) AWG number as coded connectable conductor cross	 finely stranded with core end processing 	
AWG number as coded connectable conductor cross		
section	i	

for main contacts	16 8
 for auxiliary contacts 	20 14
Safety related data	
product function	
 mirror contact according to IEC 60947-4-1 	Yes
B10 value with high demand rate according to SN 31920	450 000
proportion of dangerous failures	
 with low demand rate according to SN 31920 	40 %
 with high demand rate according to SN 31920 	73 %
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
T1 value for proof test interval or service life according to IEC 61508	20 a
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
suitability for use	
 safety-related switching on 	Yes
 safety-related switching OFF 	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

Environment

Confirmation



Vibration and Shock

Environmental Confirmations

Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates. $\label{eq:continuous}$

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=3RT2027-1AM20

Cax online generator

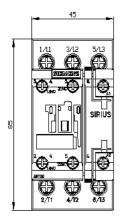
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2027-1AM20

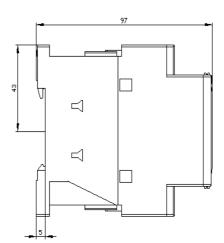
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-1AM20

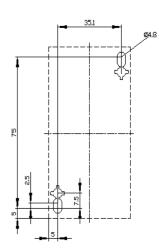
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,

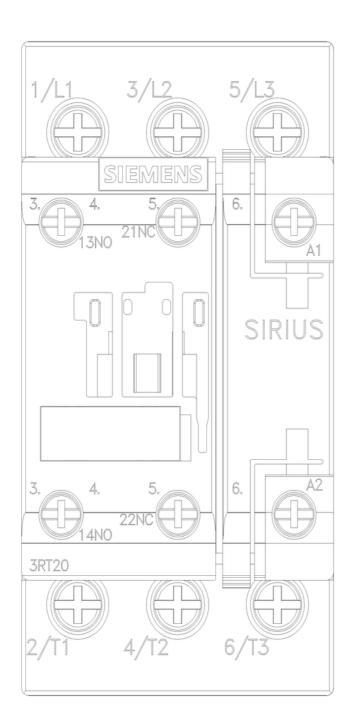
Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-1AM20/char https://support.industry.siemens.com/cs/ww/en/ps/3RT2

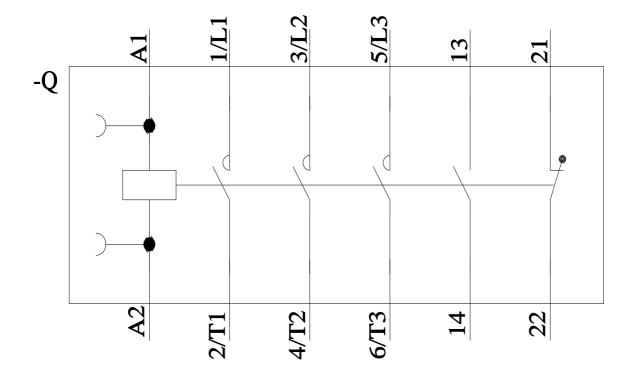
Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2027-1AM20&objecttype=14&gridview=view1











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