SIEMENS

Data sheet 3RT2017-1AF02



power contactor, AC-3e/AC-3, 12 A, 5.5 kW / 400 V, 3-pole, 110 V AC, 50/60 Hz, auxiliary contacts: 1 NC, screw terminal, size: S00 $\,$

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S00
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	1.5 W
 at AC in hot operating state per pole 	0.5 W
 without load current share typical 	1.5 W
type of calculation of power loss depending on pole	quadratic
insulation voltage	
 of main circuit with degree of pollution 3 rated value 	690 V
 of auxiliary circuit with degree of pollution 3 rated value 	690 V
surge voltage resistance	
of main circuit rated value	6 kV
of auxiliary circuit rated value	6 kV
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at AC	7,3g / 5 ms, 4,7g / 10 ms
shock resistance with sine pulse	
• at AC	11,4g / 5 ms, 7,3g / 10 ms
mechanical service life (operating cycles)	
of contactor typical	30 000 000
 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 %
Environmental footprint	

Environmental Product Declaration/EPD\	Yes
Environmental Product Declaration(EPD) Global Warming Potential [CO2 eq] total	39.6 kg
Global Warming Potential [CO2 eq] during manufacturing	1.18 kg
Global Warming Potential [CO2 eq] during mandiacturing Global Warming Potential [CO2 eq] during operation	38.5 kg
Global Warming Potential [CO2 eq] after end of life	-0.155 kg
Main circuit	0.100 kg
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
at AC-3 rated value maximum	690 V
at AC-3e rated value maximum	690 V
operational current	
 at AC-1 at 400 V at ambient temperature 40 °C rated value 	22 A
• at AC-1	
— up to 690 V at ambient temperature 40 $^{\circ}\text{C}$ rated value	22 A
— up to 690 V at ambient temperature 60 °C rated value	20 A
• at AC-3	40.4
— at 400 V rated value	12 A
— at 500 V rated value	9.2 A
— at 690 V rated value • at AC-3e	6.7 A
at AC-3e — at 400 V rated value	12 A
— at 500 V rated value	9.2 A
— at 690 V rated value	6.7 A
• at AC-4 at 400 V rated value	8.5 A
at AC-5a up to 690 V rated value	19.4 A
at AC-5b up to 400 V rated value	9.9 A
• at AC-6a	
— up to 230 V for current peak value n=20 rated value	7.2 A
— up to 400 V for current peak value n=20 rated value	7.2 A
— up to 500 V for current peak value n=20 rated value	7.2 A
— up to 690 V for current peak value n=20 rated value	6.7 A
• at AC-6a	
— up to 230 V for current peak value n=30 rated value	4.8 A
— up to 400 V for current peak value n=30 rated value	4.8 A
— up to 500 V for current peak value n=30 rated value	4.8 A
— up to 690 V for current peak value n=30 rated value	4.8 A
minimum cross-section in main circuit at maximum AC-1 rated value	4 mm²
operational current for approx. 200000 operating cycles at AC-4	
at 400 V rated value	4.1 A
at 690 V rated value	3.3 A
operational current	
at 1 current path at DC-1 at 24 V rated value.	20 Δ
— at 24 V rated value — at 60 V rated value	20 A 20 A
— at 110 V rated value	2.1 A
— at 220 V rated value	0.8 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.6 A
with 2 current paths in series at DC-1	
— at 24 V rated value	20 A
— at 60 V rated value	20 A
— at 110 V rated value	
	12 A
— at 220 V rated value	12 A 1.6 A
— at 220 V rated value— at 440 V rated value	
	1.6 A

— at 24 V rated value	20 A
— at 60 V rated value	20 A
— at 110 V rated value	20 A
— at 220 V rated value	20 A
— at 440 V rated value	1.3 A
— at 600 V rated value	1 A
 at 1 current path at DC-3 at DC-5 	
— at 24 V rated value	20 A
— at 60 V rated value	0.5 A
— at 110 V rated value	0.15 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	20 A
— at 60 V rated value	5 A
— at 110 V rated value	0.35 A
 with 3 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	20 A
— at 60 V rated value	20 A
— at 110 V rated value	20 A
— at 220 V rated value	1.5 A
— at 440 V rated value	0.2 A
— at 600 V rated value	0.2 A
operating power	
• at AC-3	
— at 230 V rated value	3 kW
— at 400 V rated value	5.5 kW
— at 500 V rated value	5.5 kW
— at 690 V rated value	5.5 kW
• at AC-3e	
— at 230 V rated value	3 kW
— at 400 V rated value	5.5 kW
— at 500 V rated value	5.5 kW
— at 690 V rated value	5.5 kW
operating power for approx. 200000 operating cycles at AC-	
4	
at 400 V rated value	2 kW
at 690 V rated value	2.5 kW
operating apparent power at AC-6a	
 up to 230 V for current peak value n=20 rated value 	2.8 kVA
 up to 400 V for current peak value n=20 rated value 	4.9 kVA
 up to 500 V for current peak value n=20 rated value 	6.2 kVA
• up to 690 V for current peak value n=20 rated value	8 kVA
operating apparent power at AC-6a	
• up to 230 V for current peak value n=30 rated value	1.9 kVA
• up to 400 V for current peak value n=30 rated value	3.3 kVA
• up to 500 V for current peak value n=30 rated value	4.1 kVA
• up to 690 V for current peak value n=30 rated value	5.7 kVA
short-time withstand current in cold operating state up to	
40 °C	200 At Hearinimum group position and to AC 4 artists and
limited to 1 s switching at zero current maximum	200 A; Use minimum cross-section acc. to AC-1 rated value
limited to 5 s switching at zero current maximum limited to 40 s switching at zero surrent maximum	123 A; Use minimum cross-section acc. to AC-1 rated value
limited to 10 s switching at zero current maximum limited to 20 s switching at zero surrent maximum	96 A; Use minimum cross-section acc. to AC-1 rated value
Ilimited to 30 s switching at zero current maximum Ilimited to 60 s switching at zero surrent requireum	74 A; Use minimum cross-section acc. to AC-1 rated value
Iimited to 60 s switching at zero current maximum	61 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	40,000,4%
• at AC	10 000 1/h
operating frequency	4 000 4/1
• 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	110 V
at 60 Hz rated value	110 V
operating range factor control supply voltage rated value of	110 V
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	37 VA
• at 60 Hz	33 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.8
• at 60 Hz	0.75
apparent holding power of magnet coil at AC	
• at 50 Hz	5.7 VA
• at 60 Hz	4.4 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.25
• at 60 Hz	0.25
closing delay	5.E5
• at AC	9 35 ms
opening delay	0 00 III0
• at AC	4 15 ms
	10 15 ms
arcing time	
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	4
number of NC 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	1A
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	ridary switching per 100 million (17 v, 1 mz)
full-load current (FLA) for 3-phase AC motor	
	11 A
at 480 V rated value at 600 V rated value	11 A
 at 600 V rated value 	11 A
violded machanical newfarmance [hu1	
yielded mechanical performance [hp]	
• for single-phase AC motor	0.5 hr.
	0.5 hp 2 hp

** of a phase AC motor		
	• for 3-phase AC motor	
at 470460 V rated value	— at 200/208 V rated value	3 hp
	— at 220/230 V rated value	3 hp
contact rating of auxiliary contacts according to U. A000 / 0000 Stort circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of assignment 2 required position fastening method fast	— at 460/480 V rated value	7.5 hp
Short-circuit protection of the fuse link - with type of coordination 1 required - with type of assignment 1 required of or short-circuit protection of the auxiliary switch required Installation mounting control of the auxiliary switch required Installation mounting position 4-1100* rotation possible on vertical mounting surface; can be bitled forward and backward by + 22.25 or vertical mounting surface; can be bitled forward and backward by + 22.25 or vertical mounting surface; can be bitled forward and backward by + 22.25 or vertical mounting surface; can be bitled forward and backward by + 22.25 or vertical mounting surface; can be bitled forward and backward by + 22.25 or vertical mounting surface; can be bitled forward and backward by + 22.25 or vertical mounting surface; can be bitled forward and backward by + 22.25 or vertical mounting surface; can be bitled forward and backward by + 22.25 or vertical mounting surface; can be bitled forward and backward by + 22.25 or vertical mounting surface; can be bitled forward and backward by + 22.25 or vertical mounting surface; can be bitled forward and backward by + 22.25 or vertical mounting surface; can be bitled forward and backward by + 22.25 or vertical mounting surface; can be bitled forward and backward by + 22.25 or vertical mounting surface; can be bitled forward and backward by + 22.25 or vertical mounting surface; can be bitled forward and backward by + 22.25 or vertical mounting surface; can be bitled forward and backward by + 22.25 or vertical mounting surface; can be bitled forward and backward by + 22.25 or vertical mounting surface; can be bitled forward and backward by + 22.25 or vertical mounting surface; can be bitled forward and backward by + 22.25 or vertical mounting surface; can be bitled forward and backward by + 22.25 or vertical mounting surface; can be bitled forward and backward by + 22.2	— at 575/600 V rated value	10 hp
design of the fuse link	contact rating of auxiliary contacts according to UL	A600 / Q600
* for short-circuit protection of the main circuit - with type of coordination 1 required - with type of assignment 2 required - with type of assignment 2 required - with type of assignment 2 required - g5: 20A (850V.100AA), abf. 16A (850V.100AA), BS88: 35A (415V.80AA) 96: 10 A (850V.100AA), abf. 16A (850V.100AA), BS88: 35A (415V.80AA) 96: 10 A (850V.100AA), abf. 16A (850V.100AA), BS88: 35A (415V.80AA) 96: 10 A (850V.100AA), abf. 16A (850V.100AA), BS88: 35A (415V.80AA) **To assist a contraction of the auxiliary switch required fastalization mounting position **To assist a contraction of the auxiliary switch required fastalization mounting position **To assist a contraction of the auxiliary switch required fastalization mounting surface; can be sittled forward and backward by tr. 22.5° or vertical mounting surface; can be sittled forward and backward by tr. 22.5° or vertical mounting surface; can be sittled forward and backward by tr. 22.5° or vertical mounting surface; can be sittled forward and backward by tr. 22.5° or vertical mounting surface; can be sittled forward and backward by tr. 22.5° or vertical mounting surface; can be sittled forward and backward by tr. 22.5° or vertical mounting surface; can be sittled forward and backward by tr. 22.5° or vertical mounting surface; can be sittled forward and backward by tr. 22.5° or vertical mounting surface; can be sittled forward and backward by tr. 22.5° or vertical mounting surface; can be sittled forward and backward by tr. 22.5° or vertical mounting surface; can be sittled forward and backward by tr. 22.5° or vertical mounting surface; can be sittled forward and backward by tr. 22.5° or vertical mounting surface; can be sittled forward and backward by tr. 22.5° or vertical mounting surface; can be sittled forward and backward by tr. 22.5° or vertical mounting surface; can be sittled forward and backward by tr. 22.5° or vertical mounting surface; can be sittled forward and backward by tr. 22.5° or vertical mounting surface; can be sittled forwa	Short-circuit protection	
— with type of coordination 1 required	design of the fuse link	
	• for short-circuit protection of the main circuit	
of or short-circuit protection of the auxillary switch required mounting possible on vertical mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled for all mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled forward and backward by ± 2.2.5° on vertical mounting surface; can be titled forward and backward by ± 2.2.5°	 — with type of coordination 1 required 	gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)
mounting position #4-180" rotation possible on ventical mounting surface; can be tilted forward and backward by 14-22.5" on vertical mounting surface. ##50 mounting method ##50 mounting onto 35 mm DIN rail according to DIN EN 60715 ##50 mounting surface ##50 mounting surface ##50 mounting surface ##50 mounting ##50 mounting surface ##50	 — with type of assignment 2 required 	gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)
mounting position ##C180** rotation possible on vertical mounting surface; can be tilted forward and backward by ##C25* for wereficial mounting surface; can be tilted forward and backward by ##C25* for wereficial mounting surface; can be tilted forward and backward by ##C25* for wereficial mounting surface; can be tilted forward and backward by ##C25* for wereficial mounting surface; can be tilted forward and backward by ##C25* for wereficial mounting surface; can be tilted forward and backward by ##C25* for wereficial mounting surface; can be tilted forward and backward by ##C25* for wereficial mounting surface; can be tilted forward and backward by ##C25* for wereficial mounting surface; can be tilted forward and backward by ##C25* for wereficial mounting surface; can be tilted forward and backward by ##C25* for wereficial excess the formal content of the forward and backward by ##C25* for wereficial excess the forward and backward by ##C25* for wereficial excess the forward and backward by ##C25* for wereficial excess the forward and backward by ##C25* for wereficial excess the forward and backward by ##C25* for wereficial excess the forward and backward by ##C25* for wereficial excess the forward and backward by ##C25* for wereficial excess the forward and backward by ##C25* for wereficial excess the forward and backward by ##C25* for wereficial excess the forward and backward by ##C25* for wereficial excess the forward and backward by ##C25* for wereficial excess the forward and backward by ##C25* for wereficial excess the forward and backward by ##C25* for wereficial excess the forward and backward by ##C25* for wereficial excess the forward and backward by ##C25* for wereficial excess the forward and backward by ##C25* for wereficial excess the forward and backward by ##C25* for wereficial excess the forward and backward by ##C25* for wereficial excess the forward and backward by ##C25* for wereficial excess the forward and backward by ##C25* for wereficial excess the forward and backward by ##C25* for	• for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)
backward by 4/- 22.5° on vertical mounting surface fastering method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 height width 45 mm depth 73 mm required spacing • with side-by-side mounting — forwards — upwards — downwards — the side • for grounded parts — rowards — upwards — the side — downwards — one wards — one wards — upwards — the side — downwards • for live parts — forwards — upwards — the side — downwards • for live parts — forwards — upwards — the side — downwards • for five parts — forwards — upwards — the side — downwards — the side — downwards — one man forwards — the side — for main current foruit • for auxiliary and control circuit • for main current foruit • for main current for auxiliary contacts • of magnet coil yep of controctable conductor cross-sections • for main contacts — solid — solid or stranded — finely stranded with core end processing • for AVC cables for main 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 for auxiliary contacts • solid or stranded — finely stranded with core end processing • for AVC cables for main contacts — solid or stranded — finely stranded with core end processing • for auxiliary contacts — solid or stranded — finely stranded with core end processing • for AVG cables for maxiliary contacts — solid or stranded — finely stranded with core end processing • for AVG cables for auxiliary contacts — solid or stranded — finely stranded with core end processing • for AVG cables for auxiliary contacts — solid or stranded — finely stranded with core end processing •	Installation/ mounting/ dimensions	
Series and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715	mounting position	
height width 45 mm depth 78 mm required spacing • with side-by-side mounting - forwards 10 mm - orwards 10 mm - at the side 0 mm - orwards 10 mm - orwards 50 mm - orwards 10 mm - orwards 10 mm - orwards 10 mm - orwards 50 mm - orwards 5	fortaning mothers.	· ·
width depth 73 mm required spacing • with side-by-side mounting — forwards 10 mm — downwards 10 mm — orwards 10 mm — orwards 10 mm — orwards 10 mm — orwards 10 mm — at the side 0 mm — at the side 6 mm — orwards 10 mm — at the side 6 mm — orwards 10 mm — at the side 6 mm — orwards 10 m		
required spacing • with side-by-side mounting — forwards — upwards — ownwards — 10 mm — at the side • for grounded parts — Inowards — upwards — 10 mm — ownwards — upwards — 10 mm — ownwards — upwards — 10 mm — ownwards — ownwards — ownwards — ownwards — 10 mm — ownwards —		
required spacing with side-by-side mounting —forwards —upwards —upwards —of more at the side —for grounded parts —forwards —upwards —for grounded parts —forwards —upwards —for grounded parts —forwards —for live parts —forwards —formal courted circuit —for auxiliary and control circuit —for auxiliary and control circuit —for auxiliary and control circuit —for auxiliary contacts —formain contac		
• with side-by-side mounting forwards upwards at the side forgrounded parts forwards forwards forwards forwards forwards forwards forwards forwards upwards downwards downwards downwards downwards downwards for live parts forwards downwards for main current circuit for auxiliary and control circuit for auxiliary and control circuit for auxiliary and control circuit for famin contact solid solid solid solid solid or stranded finely stranded with core end processing for AWG cables for main contacts solid soli	·	/3 !!!!!
forwards upwards	· · · · · · · · · · · · · · · · · · ·	
- upwards	Ç	10 mm
- downwards - at the side 0 mm • for grounded parts - forwards 10 mm - upwards 10 mm • at the side 6 mm - downwards 10 mm • for live parts - forwards 10 mm • for live parts - forwards 10 mm • for live parts - forwards 10 mm - downwards 10 mm • for main current circuit screw-type terminals screw-type t		
- at the side • for grounded parts - forwards - upwards - upwards - at the side - downwards • for live parts - forwards - upwards - for live parts - forwards - upwards - for live parts - forwards - upwards - downwards - upwards - downwards - downwards - downwards - downwards - downwards - to mm - 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 contacts • of magnet coil type of connectable conductor cross-sections • for main contacts - solid - solid or stranded - finely stranded with core end processing • for AWG cables for main contacts • solid • stranded • finely stranded with core end processing • finely stranded with core end processing • for or stranded • finely stranded with core end processing • for for stranded • finely stranded with core end processing • for or stranded • finely stranded with core end processing • for or stranded • finely stranded with core end processing • for 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 • finely stranded with core end processing • for AWG cables for auxiliary contacts • solid or stranded • finely stranded with core end processing • for AWG cables for auxiliary contacts • for for AWG cables for auxiliary contacts	·	
- forwards		U IIIIII
- upwards - at the side - downwards 10 mm • for live parts - forwards - upwards - upwards - downwards 10 mm - downwards - at the side - domnwards - at the side - downwards - at the side - downwards - at the side - domnwards - at the side - for mm Connections/ Torminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts - solid - solid or stranded - finely stranded with core end processing • for AWG cables for main contacts • solid • stranded • finely stranded with core end processing • 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 main cortacts - 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 acables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG acables 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 end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded on solid or stranded - finely stranded on solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded on solid or stranded - finely stranded on solid or stranded - finely stranded on solid or stranded - finely		40
- at the side - downwards • for live parts - forwards - upwards - downwards - downwards - at the side - formards - at the side - formard current circuit - for auxiliary and control circuit - for auxiliary contacts - for main contacts - for main contacts - solid - solid - solid or stranded - finely stranded with core end processing - for AWG cables for main contacts - solid - solid - stranded - finely stranded with core end processing - for auxiliary contacts - solid or stranded - finely stranded with core end processing - for auxiliary contacts - solid or stranded - finely stranded with core end processing - for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing - for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing - for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing - for AWG cables for auxiliary contacts - for auxiliary 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		
- downwards • for live parts - forwards - upwards - downwards - at the side Connections/ Terminals type of electrical connection • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil - solid - solid or stranded - finely stranded with core end processing • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid - solid - solid - solid or stranded - finely stranded with core end processing • for AWG cables for main contacts • solid - sinely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid - sinely 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-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 conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing connectable conductor conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing connectable conductor conducto	•	
• for live parts — forwards — upwards — downwards — at the side Connections/ Terminals type of electrical connection • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil — solid — solid or stranded — finely stranded with core end processing • for awrication or stranded • finely stranded with core end processing • for auxiliary contacts • solid • finely stranded with core end processing • for new connectable conductor cross-section for main contacts • solid • finely stranded with core end processing • for 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 auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for fawritien connectable conductor cross-sections • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for fawritien 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 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 6 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)		
forwards upwards upwards downwards downwards at the side at		10 mm
- upwards	·	40
- downwards - at the side 6 mm Connections/ Terminals type of electrical connection • for main current circuit screw-type terminals • for auxiliary and control circuit screw-type terminals • at contactor for auxiliary contacts Screw-type terminals • of magnet coil Screw-type terminals • for main contacts • solid 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) • for AWG cables for main contacts • solid • stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • for auxiliary		
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type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts — solid — solid — solid consultary stranded with core end processing • for AWG cables conductor cross-section for auxiliary contacts • solid • stranded • finely stranded with core end processing • for linely stranded with core end processing • for auxiliary contacts • solid • stranded • finely stranded with core end processing • for 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 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 \$2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²		o mm
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• for main contacts — solid — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts • solid • stranded • finely stranded with core end processing • for AWG cables for main contacts • solid • stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded • finely stranded with core end processing • for auxiliary contacts		ociew-type terminals
- solid - solid - solid or stranded - finely stranded with core end processing - solid or stranded - solid or stranded - solid or stranded - finely stranded with core end processing - solid - stranded - stranded - stranded - stranded - stranded - stranded - sinely stranded with core end processing - solid or stranded - solid	· ·	
- solid or stranded - finely stranded with core end processing • for AWG cables for main contacts • solid • stranded • finely stranded with core end processing • for AWG cables for main contacts • solid • stranded • finely stranded with core end processing • finely stranded with core end processing • solid or stranded • finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts • for AWG cables for auxiliary contacts - Solid or stranded conductor cross conductor cross		2v (0.5
 — finely stranded with core end processing ● for AWG cables for main contacts Exemple 2 (20 1.5 mm²), 2x (0.75 2.5 mm²) Exemple 2 (20 16), 2x (18 14), 2x 12 Exemple 3 (20 16), 2x (18 14), 2x 12 Exemple 4 (20 16), 2x (18 14), 2x 12 Exemple 5 (20 16), 2x (18 14), 2x 12 Exemple 6 (20 16), 2x (18 14), 2x 12 Exemple 7 (20 16), 2x (18 14), 2x 12 Exemple 7 (20 16), 2x (18 14), 2x 12 Exemple 8 (20 16), 2x (18 14), 2x 12 Exemple 9 (20 16), 2x (18 14), 2x 12 Exemple 9 (20 16), 2x (18 14), 2x 12 Exemple 9 (20 16), 2x (18 14), 2x 12 Exemple 9 (20 16), 2x (18 14), 2x 12 Exemple 9 (20 16), 2x (18 14), 2x 12 		
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type of connectable conductor cross-sections		
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• for AWG cables for auxiliary contacts 2x (20 16), 2x (18 14), 2x 12 AWG number as coded connectable conductor cross		
AWG number as coded connectable conductor cross		
	i	ZX (ZU 16), ZX (18 14), ZX 12
section		

• for main contacts	20 12
 for auxiliary contacts 	20 12
Safety related data	
product function	
 mirror contact according to IEC 60947-4-1 	Yes
 positively driven operation according to IEC 60947-5-1 	No
suitable for safety function	Yes
suitability for use safety-related switching OFF	Yes
service life maximum	20 a
test wear-related service life necessary	Yes
proportion of dangerous failures	
 with low demand rate according to SN 31920 	40 %
 with high demand rate according to SN 31920 	73 %
B10 value with high demand rate according to SN 31920	1 000 000
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
ISO 13849	
device type according to ISO 13849-1	3
overdimensioning according to ISO 13849-2 necessary	Yes
IEC 61508	
safety device type according to IEC 61508-2	Type A
T1 value	
 for proof test interval or service life according to IEC 61508 	20 a
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
Approvals Certificates	
General Product Approval	



Confirmation







<u>KC</u>

General Product Approval

EMV

Functional Saftey

Test Certificates

Marine / Shipping





Type Examination Certificate

Type Test Certificates/Test Report

Special Test Certificate



Marine / Shipping











Miscellaneous

other

other

Railway

Environment

Confirmation

Confirmation

Special Test Certificate



Environmental Confirmations

Further information

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2017-1AF02

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2017-1AF02

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-1AF02

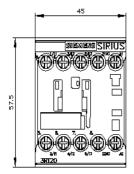
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

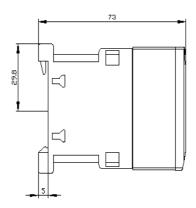
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2017-1AF02&lang=en

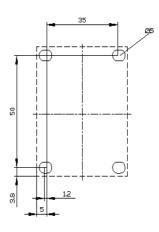
Characteristic: Tripping characteristics, I2t, Let-through current

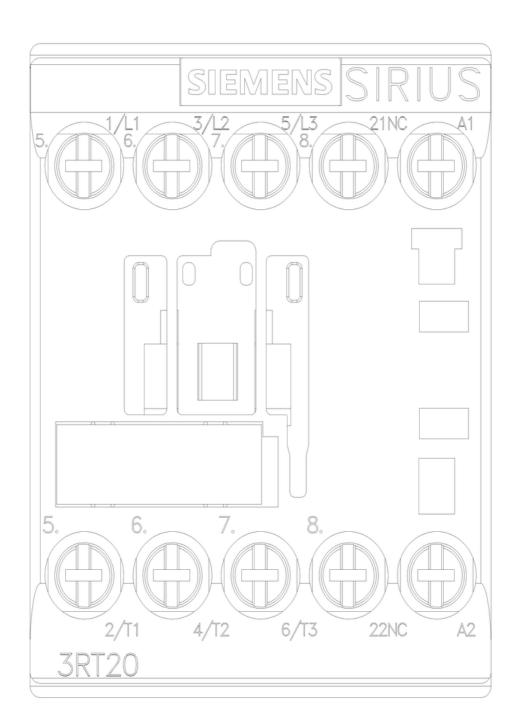
https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-1AF02/char

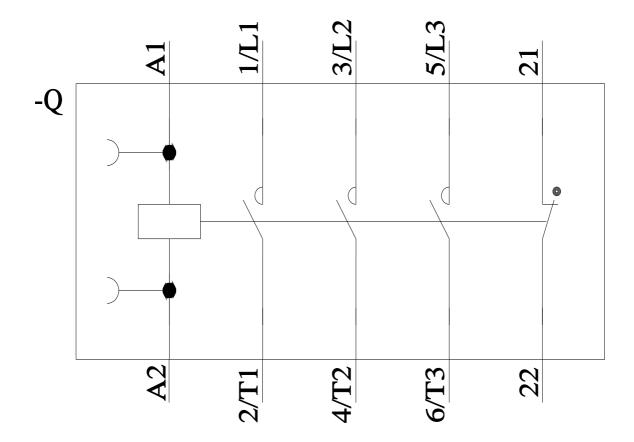
Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2017-1AF02&objecttype=14&gridview=view1











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