SIEMENS

Data sheet 3RT2035-1AR64



power contactor, AC-3 40 A, 18.5 kW / 400 V 2 NO + 2 NC, 400 V AC AC (50-60 Hz) / DC operation 3-pole, Size S2, screw terminal

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S2
product extension	
 function module for communication 	No
auxiliary switch	No
power loss [W] for rated value of the current	
 at AC in hot operating state 	6.6 W
 at AC in hot operating state per pole 	2.2 W
 without load current share typical 	18.5 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 safe isolation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at AC	9.8g / 5 ms, 6.5g / 10 ms
shock resistance with sine pulse	
• at AC	15.3g / 5 ms, 10.1g / 10 ms
mechanical service life (switching 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)	10/01/2014
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	
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	60 A
• at AC-1	
— up to 690 V at ambient temperature 40 $^{\circ}\text{C}$ rated value	60 A
— up to 690 V at ambient temperature 60 °C rated value	55 A
• at AC-3	
— at 400 V rated value	41 A
— at 500 V rated value	41 A
— at 690 V rated value	24 A
• at AC-3e	
— at 400 V rated value	41 A
— at 500 V rated value	41 A
— at 690 V rated value	24 A
• at AC-4 at 400 V rated value	35 A
 at AC-5a up to 690 V rated value 	52.8 A
at AC-5b up to 400 V rated value	33.2 A
at AC-6a	
— up to 230 V for current peak value n=20 rated value	36.5 A
 up to 400 V for current peak value n=20 rated value 	36.5 A
— up to 500 V for current peak value n=20 rated value	36.5 A
 up to 690 V for current peak value n=20 rated value at AC-6a 	24 A
— up to 230 V for current peak value n=30 rated value	24.2 A
 up to 400 V for current peak value n=30 rated value 	24.2 A
 up to 500 V for current peak value n=30 rated value 	24.2 A
— up to 690 V for current peak value n=30 rated value	24 A
minimum cross-section in main circuit at maximum AC-1 rated value operational current for approx. 200000 operating	16 mm ²
cycles at AC-4	
• at 400 V rated value	22 A
• at 690 V rated value	18.5 A
operational current	
• at 1 current path at DC-1	
— at 24 V rated value	55 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	55 A
— at 110 V rated value	45 A
— at 220 V rated value	5 A
	1A
— at 440 V rated value — at 600 V rated value	0.8 A
	0.0 A
 with 3 current paths in series at DC-1 	

— at 24 V rated value	55 A
— at 110 V rated value	55 A
— at 220 V rated value	45 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	35 A
— at 110 V rated value	2.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.1 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	55 A
— at 110 V rated value	25 A
— at 220 V rated value	5 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	55 A
— at 110 V rated value	55 A
— at 220 V rated value	25 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.35 A
operating power	
at AC-2 at 400 V rated value	18.5 kW
• at AC-3	
— at 230 V rated value	11 kW
— at 400 V rated value	18.5 kW
— at 500 V rated value	22 kW
— at 690 V rated value	22 kW
• at AC-3e	
— at 230 V rated value	11 kW
— at 400 V rated value	18.5 kW
— at 500 V rated value	22 kW
— at 690 V rated value	22 kW
operating power for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	11.6 kW
at 690 V rated value	16.8 kW
operating apparent power at AC-6a	
• up to 230 V for current peak value n=20 rated value	14.5 kVA
• up to 400 V for current peak value n=20 rated value	25.2 kVA
• up to 500 V for current peak value n=20 rated value	31.6 kVA
• up to 690 V for current peak value n=20 rated value	28.6 kVA
operating apparent power at AC-6a	
• up to 230 V for current peak value n=30 rated value	9.6 kVA
• up to 400 V for current peak value n=30 rated value	16.8 kVA
• up to 500 V for current peak value n=30 rated value	21 kVA
• up to 690 V for current peak value n=30 rated value	28.6 kVA
short-time withstand current in cold operating state	
up to 40 °C	
 limited to 1 s switching at zero current maximum 	843 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	596 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	400 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	241 A; Use minimum cross-section acc. to AC-1 rated value
limited to 60 s switching at zero current maximum	196 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	1 200 1/h
• at AC-2 maximum	750 1/h

• at AC-3 maximum	1 000 1/h
• at AC-3e maximum	1 000 1/h
• at AC-4 maximum	300 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
at 50 Hz rated value	400 V
• at 60 Hz rated value	400 440 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	212 VA
• at 60 Hz	188 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.69
• at 60 Hz	0.65
apparent holding power of magnet coil at AC	
● at 50 Hz	18.5 VA
• at 60 Hz	16.5 VA
inductive power factor with the holding power of the coil	
● at 50 Hz	0.36
• at 60 Hz	0.39
closing delay	
• at AC	10 80 ms
opening delay	
• at AC	10 18 ms
arcing time	10 20 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact	2
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact	2
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum	
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15	2 10 A
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value	2 10 A 6 A
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value	2 10 A 6 A 3 A
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value	2 10 A 6 A 3 A 2 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value	2 10 A 6 A 3 A
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12	2 10 A 6 A 3 A 2 A 1 A
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value	2 10 A 6 A 3 A 2 A 1 A
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value	2 10 A 6 A 3 A 2 A 1 A
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 60 V rated value	2 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 60 V rated value • at 110 V rated value	2 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value	2 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 3 A 2 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value	2 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 2 A 1 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value	2 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 6 A 3 A 2 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15	2 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 7 A 7 A 7 A 7 A 7 A 7 A 7 A 7 A 7 A 7
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 24 V rated value	2 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 7 A 7 A 7 A 7 A 7 A 7 A 7 A 7 A 7 A 7
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 24 V rated value	2 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 7 A 7 A 7 A 7 A 7 A 7 A 7 A 7 A 7 A 7
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 24 V rated value • at 24 V rated value • at 25 V rated value • at 27 V rated value • at 28 V rated value • at 29 V rated value • at 600 V rated value	2 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 48 V rated value • at 48 V rated value • at 48 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 24 V rated value • at 24 V rated value • at 35 V rated value • at 48 V rated value • at 49 V rated value	2 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15	2 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15	2 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15	2 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 24 V rated value • at 25 V rated value • at 25 V rated value • at 260 V rated value • at 27 V rated value • at 28 V rated value • at 29 V rated value • at 29 V rated value • at 20 V rated value	2 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15	2 10 A 6 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A

design of the fuse link • for short-circuit protection of the main circuit — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required of the circuit protection of the auxiliary switch required of the circuit protection of the auxiliary switch required of the circuit protection of the auxiliary switch required of the circuit protection of the auxiliary switch required of the circuit protection of the auxiliary switch required of the circuit protection of the auxiliary switch required of the circuit protection of the auxiliary switch required of the circuit protection of the auxiliary switch required such and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 • side-by-side mounting of the circuit protection of the auxiliary switch required spacing • with side-by-side mounting • with side-by-side mounting • with side-by-side mounting • of orwards — at the side • forwards — upwards — to mm • forwards — to mm • forwards — downwards • for live parts — forwards — to mm • forwards — to mm • forwards — downwards — do		
yelded machanical performance (hy) • for single-phase AC motor — at 100/2020 V rated value — at 200/208 V rated value — at 580/480 V rated value — at 578/500 V rated value — at 588/500 V rated value — at 588/5	 at 480 V rated value 	40 A
• for single-phase AC motor — at 101/20 V rated value — at 220/20 V rated value — 1 220/230 V rated value — 1 375/600 V rated value — 1 4 575/600 V rated value — 1 4 575/600 V rated value — 2 4 575/600 V rated value — 2 575/600 V rated value — 2 575/600 V rated value — 3 575/600 V rated value — 4 575/600 V rated value — 4 575/600 V rated value — 4 575/600 V rated value — 5 575/600 V rated value — 5 575/600 V rated value — 6 575/600 V rated value — 7 575/600 V rated value — 6 575/600 V rated value — 7 575/6	at 600 V rated value	41 A
at 1101/20 V reled value	yielded mechanical performance [hp]	
— at 230 V rated value	 for single-phase AC motor 	
• for 3-phase AC motor — at 200/230 V rated value — at 220/230 V rated value — at 220/230 V rated value — at 257/600 V rated value — 40 bp A600 / G800 A570-circutar protection design of the fuse link — for short-circuit protection of the main circuit — with type of assignment 2 required — with type of assignment 2 required — with type of assignment 2 required — for short-circuit protection of the auxiliary switch required — with type of assignment 2 required — with type of assignment 2 required — for short-circuit protection of the auxiliary switch required — with type of assignment 2 required — side by-side mounting dimensions **Testalization mounting/dimensions **Testalization mountin	 at 110/120 V rated value 	3 hp
at 200/280 V rated value	— at 230 V rated value	7.5 hp
- at 220/230 V rated value	 for 3-phase AC motor 	
at 480/480 V rated value at 575/600 V rated value at 575/600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection with type of coordination 1 required with type of assignment 2 required with side-by-side mounting with side-by-s	 at 200/208 V rated value 	10 hp
— at 575/600 V rated value	 at 220/230 V rated value 	15 hp
A600 / G600	 at 460/480 V rated value 	30 hp
Short-circuit protection design of the fuse link - with type of coordination 1 required - with type of assignment 2 required - with type of assignment 2 required - with type of assignment 2 required - whith	— at 575/600 V rated value	40 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 • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection on the auxiliary switch required • for short-circuit protection on the auxiliary switch required • for short-circuit protection on the auxiliary switch required • for short-circuit protection on the auxiliary switch required • for short-circuit protection on the auxiliary switch required • for short-circuit protection on the auxiliary switch required • for short-circuit protection on the auxiliary switch required • for short-circuit protection on the auxiliary switch required • for short-circuit protection on the auxiliary switch required • for short-circuit protection on the auxiliary short required and backward by +1-22.5 on vertical mounting surface and backward by +1-22.5 on vertical mounting surface and backward by +1-22.5 on vertic	Short-circuit protection	
- with type of coordination 1 required	design of the fuse link	
- with type of assignment 2 required	for short-circuit protection of the main circuit	
- with type of assignment 2 required - for short-circuit protection of the auxiliary switch - for short-circuit protection of the auxiliary switch required - for short-circuit protection of the auxiliary switch - for short-circuit protection for auxiliary - for short-circuit protection for auxiliary - for main contacts - solid or stranded - finely stranded with core end processing - onnectable conductor cross-section for auxiliary - finely stranded with core end processing - onnectable conductor cross-section for auxiliary - finely stranded with core end processing - onnectable conductor cross-section for auxiliary - finely stranded with core end processing - onnectable conductor cross-section for auxiliary - finely stranded with core end processing - onnectable conductor cross-section for auxiliary	with type of coordination 1 required	gG: 160 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415
• for short-circuit protection of the auxiliary switch required installation/mounting/ dimensions mounting position fastening method • side-by-side mounting • side-by-side mounting • side-by-side mounting installation/mounting burface; can be titled froward and backward by 4-, 22.5° on vertical mounting surface; can be titled froward and backward by 4-, 22.5° on vertical mounting surface; can be titled froward and backward by 4-, 22.5° on vertical mounting surface; can be titled froward and succording to DIN EN 60715 • side-by-side mounting • side-by-side mounting • with side-by-side mounting • or mare side mounting • for grounded parts — forwards — downwards — 10 mm • for grounded parts — forwards — 10 mm • for grounded parts — forwards — 10 mm • for live parts — forwards — upwards — ownwards — of main current circuit • for auxillary and control circuit • for main contacts • of magnet coil type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • finely stranded wit	. 31	
required Installation/ mounting/ dimensions	 — with type of assignment 2 required 	gG: 80A (690V,100kA), aM: 50A (690V,100kA), BS88: 63A (415V,80kA)
### rotation possible on vertical mounting surface; can be tilted forward and backward by ##- 22.5" on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting surface screw and snap-on mounting noto 35 mm standard mounting rail according to DIN EN 60715 ### side-by-side mounting width	·	gG: 10 A (500 V, 1 kA)
fastening method screw and sap-on mounting onto 35 mm standard mounting surface screw and sap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 • side-by-side mounting height vidth depth 114 mm 174 mm required spacing • with side-by-side mounting — forwards — upwards — at the side • of orgounded parts — forwards — upwards — upwards — at the side • of orgounded parts — of live parts — at the side • of main contacts • for auxiliary and control circuit • for auxiliary and control circuit • of or auxiliary contacts • of main contacts • screw-type terminals type of connectable conductor cross-section for main contacts • finely stranded with core end processing • finely stranded with core auxiliary • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core and processing • finely stranded with core end processing	Installation/ mounting/ dimensions	
side-by-side mounting side-by-side mounting side-by-side mounting Yes height 114 mm width depth 174 mm required spacing with side-by-side mounting - forwards - upwards - downwards - at the side - for grounded parts - the side - downwards - to firm an contacts - for auxiliary and control circuit - of or auxiliary and control cross-section for main contacts - sinely stranded with core end processing - at AWG cables for main contacts - finely stranded with core end processing - finely stranded wi	mounting position	
* side-by-side mounting * height	fastening method	screw and snap-on mounting onto 35 mm standard mounting rail
Neight 114 mm 55 mm 55 mm 6	side-by-side mounting	
width 55 mm depth 174 mm required spacing 74 mm e with side-by-side mounting 75 mm - forwards 10 mm - downwards 10 mm - at the side 0 mm e for grounded parts 10 mm - upwards 10 mm - at the side 6 mm - downwards 10 mm e for live parts 10 mm - forwards 10 mm - upwards 10 mm - upwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 10 mm - at the side 6 mm Connections/ Terminals type of electrical connection screw-type terminals • for main current circuit screw-type terminals • for auxiliary and control circuit screw-type terminals • at contactor for auxiliary contacts Screw-type terminals • for main contacts Screw-type terminals type of connectable conductor cross-sections 6 mm², 1x (1 35 mm²) • formalin contacts 2x (1 25 mm²), 1x (1 35 mm²) - solid or stranded 2x (1 25 mm²), 1x (1 35 mm²) - at AWG cables for main contacts 2x (1 25 mm²), 1x (1		114 mm
required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — upwards — upwards — to mm — odwnwards — upwards — upwards — upwards — upwards — at the side — downwards — 10 mm — at the side — downwards — 10 mm — of live parts — forwards — upwards — 10 mm — odwnwards — 10 mm — upwards — 10 mm — odwnwards — 10 mm — upwards — upwards — 10 mm — upwards — at the side — 6 mm Connections/Terminals type of electrical connection • for main current circuit • of magnet coil type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts • finely stranded with core end processing		55 mm
 with side-by-side mounting forwards upwards domm downwards mm at the side omm for grounded parts forwards upwards upwards mm downwards mm downwards for live parts for live parts for for live parts downwards mm downwards mm downwards mm downwards mm downwards mm downwards mm for main current circuit for auxiliary and control circuit at contactor for auxiliary contacts of magnet coil screw-type terminals type of connectable conductor cross-sections for main contacts at AWG cables for main contacts finely stranded with core end processing finely stranded with core end proce	depth	174 mm
forwards upwards downwards downwards at the side for grounded parts forwards upwards at the side forwards at the side downwards at the side downwards at the side downwards downwards for live parts forwards upwards upwards for wards upwards downwards upwards upwards downwards upwards downwards upwards downwards at the side downwards at the side 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 or stranded finely stranded with core end processing at AWG cables for main contacts finely stranded with core end processing fine	required spacing	
- upwards 10 mm 10	with side-by-side mounting	
- downwards - at the side • for grounded parts - forwards - upwards - upwards - at the side - downwards - at the side - downwards - for live parts - forwards - upwards - for live parts - forwards - upwards - downwards - downwards - at the side - downwards - at the side - downwards - at the side - formands - at the side 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 or stranded - finely stranded with core end processing • at AWG cables for main contacts - finely stranded with core end processing • finely stranded with core end processing	— forwards	10 mm
- at the side 0 mm • for grounded parts - forwards 10 mm - at the side 6 mm - downwards 10 mm • for live parts - forwards 10 mm • for live parts - forwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 10 mm - at the side 6 mm - upwards 10 mm - at the side 6 mm Connections/ Terminals type of electrical connection • for auxiliary and control circuit screw-type terminals • of magnet coil screw-type terminals type of connectable conductor cross-sections • for main contacts - solid or stranded - finely stranded with core end processing 2x (1 25 mm²), 1x (1 35 mm²) connectable conductor cross-section for main contacts • finely stranded with core end processing 1 35 mm² connectable conductor cross-section for auxiliary	— upwards	10 mm
• for grounded parts — forwards — upwards — at the side — downwards • for live parts — forwards — upwards — to main contacts — finely stranded with core end processing • finely stranded with core end processing • for eat the side - solid or stranded with core end processing • finely stranded with core end processing	— downwards	10 mm
forwards	— at the side	0 mm
- upwards - at the side - downwards 10 mm • for live parts - forwards 10 mm - upwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 10 mm - at the side 6 mm Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • of magnet coil type of connectable conductor cross-sections • for main current • finely stranded - finely stranded with core end processing • finely stranded with core end processing connectable conductor cross-section for auxiliary	 for grounded parts 	
- at the side - downwards 10 mm • for live parts - forwards - upwards - downwards 10 mm - at the side - downwards - downwards - at the side 6 mm 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 or stranded - finely stranded with core end processing • at AWG cables for main contacts • finely stranded with core end processing	— forwards	10 mm
- downwards • for live parts - forwards - upwards - upwards - downwards - at the side - 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 or stranded - finely stranded with core end processing • finely stranded with core end processing connectable conductor cross-section for auxiliary	— upwards	10 mm
 for live parts forwards 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 or stranded finely stranded with core end processing at AWG cables for main contacts finely stranded with core end processing 35 mm² connectable conductor cross-section for auxiliary at 35 mm² connectable conductor cross-section for auxiliary 	— at the side	6 mm
- forwards - 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 cuntacts - solid or stranded - finely stranded with core end processing • finely stranded with core end processing	— 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 or stranded - finely stranded with core end processing • finely stranded with core end processing connectable conductor cross-section for auxiliary 10 mm 50 mm 50 mm 50 crew-type terminals Screw-type terminals Screw-type terminals Screw-type terminals 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 2x (18 2), 1x (18 1)	for live parts	
- downwards	— forwards	10 mm
— 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 or stranded — finely stranded with core end processing • at AWG cables for main contacts • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • at AWG cables for main contacts • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • finely connectable conductor cross-section for main contacts • finely connectable conductor cross-section for auxiliary	— upwards	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 or stranded — finely stranded with core end processing • at AWG cables for main contacts • finely stranded with core end processing	— downwards	10 mm
type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts • finely stranded with core end processing • finely stranded with core end processing connectable conductor cross-section for main contacts • finely stranded with core end processing connectable conductor cross-section for main contacts • finely stranded with core end processing connectable conductor cross-section for main contacts • finely stranded with core end processing connectable conductor cross-section for auxiliary	— at the side	6 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 or stranded — finely stranded with core end processing • at AWG cables for main contacts • finely stranded with core end processing • finely stranded with core end processing connectable conductor cross-section for main contacts • finely stranded with core end processing connectable conductor cross-section for main contacts • finely stranded with core end processing connectable conductor cross-section for main contacts • finely stranded with core end processing connectable conductor cross-section for auxiliary	Connections/ Terminals	
 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 or stranded — finely stranded with core end processing at AWG cables for main contacts at AWG cables for main contacts finely stranded with core end processing at AWG cables for main contacts finely stranded with core end processing 35 mm² 		
 for auxiliary and control circuit at contactor for auxiliary contacts of magnet coil Screw-type terminals for main contacts solid or stranded finely stranded with core end processing at AWG cables for main contacts at AWG cables for main contacts finely stranded with core end processing at AWG cables for main contacts finely stranded with core end processing finely stranded with core end processing finely stranded with core end processing 35 mm² 35 mm² 		screw-type terminals
 at contactor for auxiliary contacts of magnet coil Screw-type terminals for main contacts solid or stranded finely stranded with core end processing at AWG cables for main contacts at AWG conductor cross-section for main contacts finely stranded with core end processing at AWG conductor cross-section for main contacts finely stranded with core end processing at 35 mm² at 35 mm² at 35 mm² at 35 mm² 	for auxiliary and control circuit	
 ◆ of magnet coil Screw-type terminals type of connectable conductor cross-sections ◆ for main contacts — solid or stranded — finely stranded with core end processing ◆ at AWG cables for main contacts ○ at AWG conductor cross-section for main contacts ◆ finely stranded with core end processing ★ finely stranded with core end processing ★ finely stranded with core end processing ★ finely conductor cross-section for auxiliary 		
type of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • finely connectable conductor cross-section for auxiliary type of connectable conductor cross-sections 2x (1 35 mm²), 1x (1 35 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 2x (18 2), 1x (18 1)		
 — solid or stranded — finely stranded with core end processing • at AWG cables for main contacts • finely stranded with core end processing • at AWG cables for main contacts • finely stranded with core end processing • finely stranded with core end processing 1 35 mm² 2x (1 25 mm²), 1x (1 35 mm²) 2x (18 2), 1x (18 1) 		
— finely stranded with core end processing • at AWG cables for main contacts connectable conductor cross-section for main contacts • finely stranded with core end processing tonnectable conductor cross-section for auxiliary 2x (1 25 mm²), 1x (1 35 mm²) 2x (18 2), 1x (18 1) 1 35 mm² 1 35 mm²	for main contacts	
 — finely stranded with core end processing at AWG cables for main contacts at AWG cables for main contacts connectable conductor cross-section for main contacts finely stranded with core end processing at 35 mm² 1 35 mm² 2x (1 25 mm²), 1x (1 35 mm²) 1 35 mm² 2x (18 2), 1x (18 1) 	— solid or stranded	2x (1 35 mm²), 1x (1 50 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 auxiliary 2x (18 2), 1x (18 1) 1 35 mm ²	 finely stranded with core end processing 	
connectable conductor cross-section for main contacts • finely stranded with core end processing connectable conductor cross-section for auxiliary 1 35 mm²		
connectable conductor cross-section for auxiliary		
connectable conductor cross-section for auxiliary	 finely stranded with core end processing 	1 35 mm²

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)
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
at AWG cables for auxiliary contacts	2x (20 16), 2x (18 14)
AWG number as coded connectable conductor cross section	
 for main contacts 	18 1
 for auxiliary contacts 	20 14
Safety related data	
product function	
 mirror contact according to IEC 60947-4-1 	Yes
 positively driven operation according to IEC 60947- 5-1 	No
B10 value with high demand rate according to SN 31920	1 000 000
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 y
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	

Certificates/ approvals

General Product Approval

• safety-related switching OFF



Confirmation





<u>KC</u>



Machinery

Yes



Type Examination Certificate



Special Test Certificate

Type Test Certificates/Test Report

Marine / Shipping













Marine / Shipping other Railway Dangerous Good



Confirmation

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=3RT2035-1AR64

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2035-1AR64

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2035-1AR64

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2035-1AR64&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT2035-1AR64/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2035-1AR64&objecttype=14&gridview=view1

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