SIEMENS

Data sheet 3RT2035-1AK60



power contactor, AC-3 40 A, 18.5 kW / 400 V 1 NO + 1 NC, 110 V AC 50 Hz / 120 V, 60 Hz, 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	Yes
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	11.8g / 5 ms, 7.4g / 10 ms
shock resistance with sine pulse	
• at AC	18.5g / 5 ms, 11.6g / 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	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	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	1 A 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	ZZ KVV
— at 230 V rated value	11 kW
— at 400 V rated value	18.5 kW
— at 500 V rated value	22 kW
— at 500 V rated value — at 690 V rated value	22 kW
operating power for approx. 200000 operating cycles at AC-4	22 NVV
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 2 magazines una	4 000 4/b
• at AC-3 maximum	1 000 1/h
at AC-3e maximumat AC-4 maximum	1 000 1/h
	300 1/h
Control circuit/ Control	AC
type of voltage of the control supply voltage	AC
control supply voltage at AC	440.1/
 at 50 Hz rated value at 60 Hz rated value 	110 V 120 V
operating range factor control supply voltage rated	120 V
value of magnet coil at AC	
● at 50 Hz	0.8 1.1
● at 60 Hz	0.8 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	40 40
• at AC	10 18 ms
arcing time control version of the switch operating mechanism	10 20 ms Standard A1 - A2
	Standard AT - AZ
Auxiliary circuit	1
number of NC contacts for auxiliary contacts instantaneous contact	1
number of NC contacts for auxiliary contacts	1
number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum	
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	1 10 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	1 10 A 10 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	1 10 A 10 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	1 10 A 10 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	1 10 A 10 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	1 10 A 10 A 3 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	1 10 A 10 A 3 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	1 10 A 10 A 3 A 2 A 1 A 10 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	1 10 A 10 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	1 10 A 10 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	1 10 A 10 A 3 A 2 A 1 A 10 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	1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 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 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	1 10 A 10 A 3 A 2 A 1 A 10 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	1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 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 • at 600 V rated value	1 10 A 10 A 3 A 2 A 1 A 10 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 220 V rated value	1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 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	1 10 A 10 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 600 V rated value	1 10 A 10 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 220 V rated value • at 24 V rated value • at 24 V rated value • at 350 V rated value • at 48 V rated value • at 48 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 48 V rated value • at 410 V rated value	1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A 10 A 2 A 1 A 10 A 2 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 220 V rated value • at 220 V rated value • at 600 V rated value • at 125 V rated value	1 10 A 10 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 148 V rated value • at 150 V rated value • at 125 V rated value	1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 2 A 1 A 0.9 A 0.3 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	1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 2 A 1 A 0.9 A 0.3 A 0.1 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 • at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 10 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 24 V rated value • at 25 V rated value • at 26 V rated value • at 27 V rated value • at 28 V rated value • at 29 V rated value • at 20 V rated value	1 10 A 10 A 3 A 2 A 1 A 10 A 6 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 2 A 1 A 0.9 A 0.3 A 0.1 A

* at 460 V rated value 4 at 0.4 V rated value 4 at 0.4 V rated value 4 at 0.5 V rated value 5 of single-phase AC motor 6 at 1101/20 V rated value 7.5 pp 7	e at 490 V rated value	40.0
yielded mechanical performance (hg) • for single-phase AC motor — at 110/120 V rated value — at 200209 V rated value — at 200209 V rated value — at 200209 V rated value — at 400480 V rated value — at 400480 V rated value — at 575600 V rated value — at	at 480 V rated value at 600 V rated value	40 A
In a strongle-phase AC motor In at 220 V rated value In at 220 V rated value In at 220 28 V rated value In at 35 V rated value In at 25 V rated valu		41 A
at 101/20 V rated value		
at 230 V rated value for 3-phase AC motor at 200208 V rated value at 4200230 V rated value at 4200230 V rated value at 40480 V rated value at 40480 V rated value at 575:000 V rated value with type of assignment 2 required side by-side mounting with side by-side mounting wit	· .	2 ha
• for 3-phase AC motor — at 200/280 V rated value — at 200/280 V rated value — at 400/480 V rated value — at 400/480 V rated value — at 575/500 V rated value — with type of coordination 1 required — with type of coordination 1 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 — for short-circuit protection of the auxiliary switch required — with type of assignment 2 required — side-by-side mounting dimensions mounting postition fastening method — side-by-side mounting — with side-by-side mounting — with side-by-side mounting — with side-by-side mounting — with side-by-side mounting — at the side — downwards — at the side — downwards — 10 mm — upwards — at the side — downwards — 10 mm — ownwards — at the side — downwards — 10 mm — ownwards — at the side — downwards — 10 mm — ownwards — ownwards — 10 mm — ownwards — ownwards — 10 mm — ownwards — ownwar		
		7.5 np
at 220/230 V rated value	•	40.1
at 450/480 V rated value		
		·
Short-circuit protection design of the fue link		·
Short-circuit protection design of the fuse link for short-circuit protection of the main circuit with type of coordination 1 required y, 80 kA) gG: 360 A (690 V, 100 kA), aM: 80 A (690 V, 100 kA), BS88: 125 A (415 V, 80 kA) gG: 800 A (690 V, 100 kA), aM: 50A (690 V, 100 kA), BS88: 63A (415 V, 80 kA) gG: 80A (690 V, 100 kA), aM: 50A (690 V, 100 kA), BS88: 63A (415 V, 80 kA) gG: 80A (690 V, 100 kA), aM: 50A (690 V, 100 kA)		·
design of the fuse link • 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 (5.80 kA), abit 80 A (690 V, 100 kA), abit 80 A (690 V,		A600 / P600
For short-circuit protection of the main circuit	Short-circuit protection	
- with type of coordination 1 required	design of the fuse link	
With type of assignment 2 required 96 (20 A (680V,100kA), aM: 50A (680V,100kA), BS88: 63A (415V,80kA)	 for short-circuit protection of the main circuit 	
For short-circuit protection of the auxiliary switch required	 — with type of coordination 1 required 	
required installation/ mounting/ dimensions mounting position	 — with type of assignment 2 required 	gG: 80A (690V,100kA), aM: 50A (690V,100kA), BS88: 63A (415V,80kA)
### ### ##############################	•	gG: 10 A (500 V, 1 kA)
### ### ##############################	Installation/ mounting/ dimensions	
serwa and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715 side-by-side mounting width depth 114 mm width depth 130 mm required spacing with side-by-side mounting - forwards - upwards - downwards - downwards - the side for grounded parts - forwards - the side - downwards - to low many and the side - downwards - to finite parts - forwards - downwards - to many and the side - for many and the side connectations Torminals type of electrical connection • for main current circuit • for auxiliary and control circuit • for auxiliary and control circuit • for main current circuit • 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		
Side-by-side mounting Yes	fastening method	screw and snap-on mounting onto 35 mm standard mounting rail
width 55 mm depth 130 mm required spacing • with side-by-side mounting — forwards 10 mm — downwards 10 mm — downwards 0 mm • for grounded parts 10 mm — pwards 10 mm — upwards 10 mm — at the side 6 mm — downwards 10 mm • for live parts 10 mm — forwards 10 mm — upwards 10 mm — upwards 10 mm — downwards 10 mm — 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 • for main current circuit screw-type terminals • for main contacts Screw-type terminals • for main contacts 2x (1 35 mm²), 1x (1 50 mm²) • for main contacts 2x (1 25 mm²), 1x (1 35 mm²) • at AWG cables for main contacts 2x (1 25 mm²), 1x (1 35 mm²) • for main contacts 2x (1 25 mm²), 1x (1 35 mm²) </td <td></td> <td>Yes</td>		Yes
required spacing with side-by-side mounting — forwards — upwards — downwards — at the side — for grounded parts — forwards — upwards — upwards — forwards — upwards — the side — forwards — upwards — upwards — upwards — upwards — upwards — the side — downwards — to mm — at the side — downwards — to mm — to rorwards — forwards — to mm — to rorwards — to mm — to rorwards — to mm — at the side — downwards — to mm — to main current 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 — finely strand		
e with side-by-side mounting - forwards - upwards - downwards - at the side o for grounded parts - forwards - upwards - upwards - forwards - upwards - forwards - upwards - upwards - upwards - upwards - at the side - downwards - at the side - downwards - for live parts - forwards - upwards - for live parts - forwards - upwards - downwards - upwards - downwards - at the side - downwards - at the side - for main current circuit - for auxiliary and control circuit - at contactor for auxiliary contacts - of main contacts - solid or stranded - finely stranded with core end processing - at AWG cables for main contacts - finely stranded with core end processing - finel	width	
 with side-by-side mounting forwards upwards 10 mm downwards 10 mm at the side 0 mm for grounded parts forwards upwards 10 mm upwards upwards 10 mm at the side 6 mm downwards 10 mm for live parts for live parts for live parts downwards 10 mm downwards 10 mm downwards at the side 6 mm Connections/ Terminals type of electrical connection for axiliary and control circuit at contactor for auxiliary contacts of magine coil screw-type terminals Eye of connectable conductor cross-sections for main contacts solid or stranded at AWG cables for main contacts at AWG cables for main contacts finely stranded with core end processing finely stranded with core	depth	130 mm
forwards		
- upwards - downwards - at the side 0 mm • 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 - upwards - downwards - upwards - downwards - downwards - downwards - at the side - for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of maginet 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	with side-by-side mounting	
- downwards	— forwards	10 mm
- at the side • for grounded parts - forwards - upwards - at the side - downwards • for live parts - forwards - upwards - forwards - upwards - forwards - upwards - downwards - downwards - at the side - downwards - the side - for auxiliary and control circuit • for auxiliary and control cross-section for main contacts • finely stranded with core end processing	— upwards	10 mm
• for grounded parts — forwards — upwards — at the side — downwards — for live parts — forwards — upwards — for live parts — forwards — upwards — upwards — upwards — downwards — at the side — downwards — at the side — formals **Connections/ Terminals **Top of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil **Top of connectable conductor cross-sections • for main contacts — solid or stranded — finely stranded with core end processing • finely stranded with core end processing		10 mm
forwards		0 mm
- upwards - at the side - downwards 10 mm • for live parts - forwards 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 • 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 • finely stranded with core end processing	 for grounded parts 	
- at the side - downwards • for live parts - forwards - upwards - upwards - downwards - at the side - for main corrent circuit - for main current circuit - for auxiliary and control circuit - at contactor for auxiliary contacts - of magnet coil - for main contacts - solid or stranded - finely stranded with core end processing - ta AWG cables for main contacts - finely stranded with core end processing - fine	— forwards	
- downwards • for live parts - forwards - upwards - downwards - at the side - 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 • finely stranded with core end processing	•	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 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 finely stranded with core end processing minely stranded with core end processing finely stranded with core end processing finely stranded with core end processing minely stranded with core end processing finely stranded with core end processing minely stranded with core end processing minely stranded with core end processing 	— 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 contacts solid or stranded finely stranded with core end processing • tinely stranded with core end processing • finely connectable conductor cross-section for auxiliary	— 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 • at AWG cables for main contacts • finely stranded with core end processing • finely connectable conductor cross-section for auxiliary	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 • 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 connectable conductor cross-section for auxiliary	— 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 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 connectable conductor cross-section 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 • at AWG cables 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
 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 at AWG cables for main contacts finely stranded with core end processing at AWG cables for main contacts finely stranded with core end processing at AWG connectable conductor cross-section for main contacts finely stranded with core end processing at a AWG connectable conductor cross-section for main contacts finely stranded with core end processing at a AWG connectable conductor cross-section for main contacts 	Connections/ Terminals	
 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 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 35 mm² 35 mm² 	type of electrical connection	
 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 cables for main contacts finely stranded with core end processing finely stranded with core end processing at AWG conductor cross-section for main contacts finely stranded with core end processing at all contacts finely stranded with core end processing at all contacts finely stranded with core end processing at all contacts finely stranded with core end processing at all contacts at all contacts	for main current 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 at AWG cables for main contacts at AWG cables for main contacts finely stranded with core end processing finely stranded with core end processing finely connectable conductor cross-section for auxiliary Screw-type terminals 2x (1 35 mm²), 1x (1 50 mm²) 2x (1 25 mm²), 1x (1 35 mm²) 2x (18 2), 1x (18 1) 	 for auxiliary and control circuit 	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 connectable conductor cross-section for main contacts • finely stranded with core end processing • finely stranded with core end processing 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 (1 35 mm²) 1 35 mm² connectable conductor cross-section for auxiliary	 at contactor for auxiliary contacts 	Screw-type terminals
 for main contacts 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 35 mm² connectable conductor cross-section for auxiliary 	of magnet coil	Screw-type terminals
— solid or stranded — finely stranded with core end processing • at AWG cables for main contacts • finely stranded with core end processing connectable conductor cross-section for auxiliary 2x (1 35 mm²), 1x (1 35 mm²) 2x (18 2), 1x (18 1) 1 35 mm² 1 35 mm²	type of connectable conductor cross-sections	
— 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 • finely stranded with core end processing connectable 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 	
 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 mm² 1 35 mm²	— solid or stranded	2x (1 35 mm²), 1x (1 50 mm²)
connectable conductor cross-section for main contacts • finely stranded with core end processing connectable conductor cross-section for auxiliary	 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 connectable conductor cross-section for auxiliary		
connectable conductor cross-section for auxiliary		
connectable conductor cross-section for auxiliary		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>



Functional
EMC Safety/Safety of Declaration of Conformity Test Certificates
Machinery

Yes



Type Examination Certificate



Type Test Certificates/Test Report

Special Test Certificate

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=3RT2035-1AK60

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2035-1AK60

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

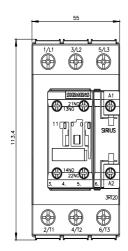
https://support.industry.siemens.com/cs/ww/en/ps/3RT2035-1AK60

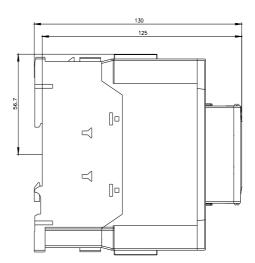
Characteristic: Tripping characteristics, I2t, Let-through current

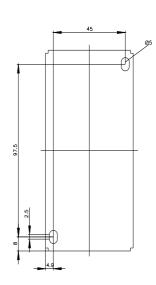
https://support.industry.siemens.com/cs/ww/en/ps/3RT2035-1AK60/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2035-1AK60&objecttype=14&gridview=view1







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2/15/2022