# **SIEMENS**

Data sheet 3RT2035-1AG24



power contactor, AC-3 40 A, 18.5 kW / 400 V 2 NO + 2 NC, 110 V AC 50 / 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	
<ul> <li>function module for communication</li> </ul>	No
<ul><li>auxiliary switch</li></ul>	No
power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	6.6 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	2.2 W
<ul> <li>without load current share typical</li> </ul>	17.2 W
insulation voltage	
<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	690 V
<ul> <li>of auxiliary circuit with degree of pollution 3 rated value</li> </ul>	690 V
surge voltage resistance	
<ul> <li>of main circuit rated value</li> </ul>	6 kV
<ul> <li>of auxiliary circuit rated value</li> </ul>	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)	
<ul> <li>of contactor typical</li> </ul>	10 000 000
<ul> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> </ul>	5 000 000
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	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	
<ul> <li>during operation</li> </ul>	-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
<ul> <li>at AC-5a up to 690 V rated value</li> </ul>	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
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	36.5 A
— up to 500 V for current peak value n=20 rated value	36.5 A
<ul> <li>up to 690 V for current peak value n=20 rated value</li> <li>at AC-6a</li> </ul>	24 A
— up to 230 V for current peak value n=30 rated value	24.2 A
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	24.2 A
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	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 <sup>2</sup>
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
<ul> <li>with 3 current paths in series at DC-1</li> </ul>	

— 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
<ul> <li>at 1 current path at DC-3 at DC-5</li> </ul>	
— 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
<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>	
— 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
<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul>	
— 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	
<ul> <li>limited to 1 s switching at zero current maximum</li> </ul>	843 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	596 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 10 s switching at zero current maximum</li> </ul>	400 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 30 s switching at zero current maximum</li> </ul>	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

<ul><li>at AC-3 maximum</li></ul>	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	110 V
at 60 Hz rated value	110 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	210 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	17.2 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	
number of NC contacts for auxiliary contacts instantaneous contact	2
number of NO contacts for auxiliary contacts instantaneous contact	2
operational current at AC-12 maximum	10 A
operational current at AC-15	
operational current at AC-15  • at 230 V rated value	6 A
operational current at AC-15  • at 230 V rated value  • at 400 V rated value	6 A 3 A
<ul> <li>operational current at AC-15</li> <li>at 230 V rated value</li> <li>at 400 V rated value</li> <li>at 500 V rated value</li> </ul>	6 A 3 A 2 A
<ul> <li>operational current at AC-15</li> <li>at 230 V rated value</li> <li>at 400 V rated value</li> <li>at 500 V rated value</li> <li>at 690 V rated value</li> </ul>	6 A 3 A
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	6 A 3 A 2 A 1 A
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	6 A 3 A 2 A 1 A
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	6 A 3 A 2 A 1 A
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	6 A 3 A 2 A 1 A  10 A 6 A 6 A
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	6 A 3 A 2 A 1 A  10 A 6 A 6 A 3 A
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	6 A 3 A 2 A 1 A  10 A 6 A 6 A 3 A 2 A
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	6 A 3 A 2 A 1 A  10 A 6 A 6 A 3 A 2 A 1 A
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	6 A 3 A 2 A 1 A  10 A 6 A 6 A 3 A 2 A
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	6 A 3 A 2 A 1 A  10 A 6 A 6 A 3 A 2 A 1 A 0.15 A
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	6 A 3 A 2 A 1 A  10 A 6 A 6 A 3 A 2 A 1 A 0.15 A
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 48 V rated value  operational current at DC-13 • at 24 V rated value • at 48 V rated value	6 A 3 A 2 A 1 A  10 A 6 A 6 A 3 A 2 A 1 A 0.15 A
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 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value  operational current at DC-13 • at 24 V rated value • at 48 V rated value • at 600 V rated value • at 600 V rated value	6 A 3 A 2 A 1 A  10 A 6 A 6 A 3 A 2 A 1 A  0.15 A
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  operational current at DC-13 • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 110 V rated value • at 110 V rated value	6 A 3 A 2 A 1 A  10 A 6 A 6 A 3 A 2 A 1 A 0.15 A
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 150 V rated value • at 150 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value	6 A 3 A 2 A 1 A  10 A 6 A 6 A 3 A 2 A 1 A 0.15 A
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 155 V rated value • at 150 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value	6 A 3 A 2 A 1 A  10 A 6 A 6 A 3 A 2 A 1 A 0.15 A  6 A 2 A 2 A 1 A 0.9 A 0.3 A
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 155 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value • at 120 V rated value	6 A 3 A 2 A 1 A  10 A 6 A 6 A 3 A 2 A 1 A 0.15 A
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 110 V rated value • at 220 V rated value • at 600 V rated value • at 220 V rated value • at 24 V rated value • at 25 V rated value • at 25 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 120 V rated value • at 600 V rated value • at 600 V rated value	6 A 3 A 2 A 1 A  10 A 6 A 6 A 3 A 2 A 1 A 0.15 A  6 A 2 A 2 A 1 A 0.9 A 0.3 A
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 155 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value • at 120 V rated value	6 A 3 A 2 A 1 A  10 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  • 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 gift in the suit of the switch of t		
yelded machanical performance (hy)  • for single-phase AC motor — at 100/2020 V rated value — at 200/208 V rated value — at 30 hp — at 460/480 V rated value — at 578/500 V rated value — at 588/500 V rated value	<ul> <li>at 480 V rated value</li> </ul>	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 — 6 575/600 V rated value — 7 575/600 V rated value — 6 575/600 V rated value — 7 575/600 V rated value — 7 575/600 V rated value — 6 675/600 V rated value — 7 575/600 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	<ul> <li>for single-phase AC motor</li> </ul>	
• 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	<ul> <li>at 110/120 V rated value</li> </ul>	3 hp
at 200/280 V rated value	— at 230 V rated value	7.5 hp
- at 220/230 V rated value	<ul> <li>for 3-phase AC motor</li> </ul>	
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	<ul> <li>at 200/208 V rated value</li> </ul>	10 hp
— at 575/600 V rated value	<ul> <li>at 220/230 V rated value</li> </ul>	15 hp
A600 / G600	<ul> <li>at 460/480 V rated value</li> </ul>	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  - 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 5+. 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  in the side option of the auxiliary surface according to DIN EN 60715  * screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715  * screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715  * screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715  * screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715  * screw and snap-on mounting onto 35 mm standard mounting surface; can be titled according to DIN EN 60715  * screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715  * s mm  10 mm  20 mounting vertical ended according to DIN EN 60715  20 main contacts  10 mm  20 main contacts  20 main contact	. 31	
required   Installation/ mounting/ dimensions	<ul> <li>— with type of assignment 2 required</li> </ul>	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 end processing • 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 auxiliary • finely stranded with core and processing • finely stranded with cor	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       • type of connectable conductor cross-sections     6 for main contacts       • for main contacts     2x (1 35 mm²), 1x (1 50 mm²)       2x (1 25 mm²), 1x (1 35 mm²)     2x (1 25 mm²), 1x (1 35 mm²)       • finely stranded with core end processing     1 35 mm²       • finely stranded with core end processing		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
<ul> <li>with side-by-side mounting</li> <li>forwards</li> <li>upwards</li> <li>domm</li> <li>downwards</li> <li>mm</li> <li>at the side</li> <li>omm</li> <li>for grounded parts</li> <li>forwards</li> <li>upwards</li> <li>upwards</li> <li>mm</li> <li>downwards</li> <li>mm</li> <li>downwards</li> <li>for live parts</li> <li>for live parts</li> <li>for live parts</li> <li>downwards</li> <li>mm</li> <li>downwards</li> <li>mm</li> <li>downwards</li> <li>mm</li> <li>downwards</li> <li>mm</li> <li>downwards</li> <li>mm</li> <li>downwards</li> <li>mm</li> <li>for main current circuit</li> <li>for auxiliary and control circuit</li> <li>at contactor for auxiliary contacts</li> <li>of magnet coil</li> <li>screw-type terminals</li> <li>type of connectable conductor cross-sections</li> <li>for main contacts</li> <li>at AWG cables for main contacts</li> <li>finely stranded with core end processing</li> <li>finely stranded with core end processin</li></ul>	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 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	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  • for grounded parts  10 mm  10 mm  10 mm  10 mm  6 mm  6 mm  Connectable conductor cross-section for auxiliary  10 mm  6 mm  6 mm  Connectable conductor cross-section for auxiliary  10 mm  10 mm  6 mm  6 mm  Conmetable conductor cross-section for auxiliary  10 mm  6 mm  6 mm  6 mm  Conmetable conductor cross-sections  10 mm  6 mm	— 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	<ul> <li>for grounded parts</li> </ul>	
- 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
<ul> <li>for live parts         <ul> <li>forwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> </ul> </li> <li>Connections/ Terminals         <ul> <li>type of electrical connection</li> <li>for main current circuit</li> <li>for auxiliary and control circuit</li> <li>at contactor for auxiliary contacts</li> <li>of magnet coil</li> </ul> </li> <li>type of connectable conductor cross-sections         <ul> <li>for main contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>at AWG cables for main contacts</li> <li>finely stranded with core end processing</li> <li>35 mm²</li> <li>connectable conductor cross-section for auxiliary</li> <li>at 35 mm²</li> <li>connectable conductor cross-section for auxiliary</li> </ul> </li> </ul>	— 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 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 • 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	
<ul> <li>for main current circuit</li> <li>for auxiliary and control circuit</li> <li>at contactor for auxiliary contacts</li> <li>of magnet coil</li> <li>type of connectable conductor cross-sections</li> <li>for main contacts</li> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> <li>at AWG cables for main contacts</li> <li>at AWG cables for main contacts</li> <li>finely stranded with core end processing</li> <li>at AWG cables for main contacts</li> <li>finely stranded with core end processing</li> <li>finely stranded conductor cross-section for auxiliary</li> </ul>		
<ul> <li>for auxiliary and control circuit</li> <li>at contactor for auxiliary contacts</li> <li>of magnet coil</li> <li>Screw-type terminals</li> <li>for main contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>at AWG cables for main contacts</li> <li>at AWG cables for main contacts</li> <li>finely stranded with core end processing</li> <li>at AWG cables for main contacts</li> <li>finely stranded with core end processing</li> <li>finely stranded with core end processing</li> <li>finely stranded with core end processing</li> <li>35 mm²</li> <li>35 mm²</li> </ul>		screw-type terminals
<ul> <li>at contactor for auxiliary contacts</li> <li>of magnet coil</li> <li>Screw-type terminals</li> <li>for main contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> <li>at AWG cables for main contacts</li> <li>at AWG conductor cross-section for main contacts</li> <li>finely stranded with core end processing</li> <li>at AWG conductor cross-section for main contacts</li> <li>finely stranded with core end processing</li> <li>at 35 mm²</li> <li>at 35 mm²</li> <li>at 35 mm²</li> <li>at 35 mm²</li> </ul>	for auxiliary and control circuit	
<ul> <li>◆ of magnet coil</li> <li>Screw-type terminals</li> <li>type of connectable conductor cross-sections</li> <li>◆ for main contacts</li> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> <li>◆ at AWG cables for main contacts</li> <li>○ at AWG conductor cross-section for main contacts</li> <li>◆ finely stranded with core end processing</li> <li>★ finely stranded with core end processing</li> <li>★ finely stranded with core end processing</li> <li>★ finely conductor cross-section for auxiliary</li> </ul>		
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)		
<ul> <li>— solid or stranded</li> <li>— finely stranded with core end processing</li> <li>• at AWG cables for main contacts</li> <li>• finely stranded with core end processing</li> <li>• at AWG cables for main contacts</li> <li>• finely stranded with core end processing</li> <li>• finely stranded with core end processing</li> <li>1 35 mm²</li> <li>2x (1 25 mm²), 1x (1 35 mm²)</li> <li>2x (18 2), 1x (18 1)</li> </ul>		
— 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	
<ul> <li>— finely stranded with core end processing         <ul> <li>at AWG cables for main contacts</li> <li>at AWG cables for main contacts</li> </ul> </li> <li>connectable conductor cross-section for main contacts         <ul> <li>finely stranded with core end processing</li> <li>at 35 mm²</li> </ul> </li> <li>1 35 mm²</li> <li>2x (1 25 mm²), 1x (1 35 mm²)</li> <li>1 35 mm²</li> <li>2x (18 2), 1x (18 1)</li> </ul>	— solid or stranded	2x (1 35 mm²), 1x (1 50 mm²)
<ul> <li>at AWG cables for main contacts</li> <li>connectable conductor cross-section for main contacts</li> <li>finely stranded with core end processing</li> <li>connectable conductor cross-section for auxiliary</li> </ul> 2x (18 2), 1x (18 1)  1 35 mm <sup>2</sup>	<ul> <li>finely stranded with core end processing</li> </ul>	
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	<ul> <li>finely stranded with core end processing</li> </ul>	1 35 mm²

<ul> <li>solid or stranded</li> </ul>	0.5 2.5 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm²
type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
<ul> <li>solid or stranded</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>at AWG cables for auxiliary contacts</li> </ul>	2x (20 16), 2x (18 14)
AWG number as coded connectable conductor cross section	
<ul> <li>for main contacts</li> </ul>	18 1
<ul> <li>for auxiliary contacts</li> </ul>	20 14
Safety related data	
product function	
<ul> <li>mirror contact according to IEC 60947-4-1</li> </ul>	Yes
<ul> <li>positively driven operation according to IEC 60947- 5-1</li> </ul>	No
B10 value with high demand rate according to SN 31920	1 000 000
proportion of dangerous failures	
<ul> <li>with low demand rate according to SN 31920</li> </ul>	40 %
<ul> <li>with high demand rate according to SN 31920</li> </ul>	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>



EMC	Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates	
Æ.	Type Examination Certificate	$C\epsilon$	Type Test Certificates/Test Report	Special Test Certificate

Yes

## Marine / Shipping













Marine / Shipping	other	Railway	Dangerous Good



<u>Confirmation</u>

Confirmation

Vibration and Shock

Transport Information

#### 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=3RT2035-1AG24

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2035-1AG24

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2035-1AG24

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

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2035-1AG24&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT2035-1AG24/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2035-1AG24&objecttype=14&gridview=view1

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