3RT2038-1AK60-1AA0

Data sheet



power contactor, AC-3e/AC-3, 80 A, 37 kW / 400 V, 3-pole, 110 V AC, 50 Hz / 120 V, 60 Hz, auxiliary contacts: 1 NO + 1 NC, screw terminal, size: S2, upright mounting position

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 	17.1 W
 at AC in hot operating state per pole 	5.7 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 protective separation 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 (operating cycles)	
 of contactor typical 	10 000 000
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000
 of the contactor with added auxiliary switch block typical 	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2014
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

3
690 V
690 V
90 A
90 A
80 A
80 A
80 A
58 A
80 A
80 A
58 A
55 A
79.2 A
66.4 A
70 A
70 A
70 A
58 A
46.7 A
46.7 A
46.7 A
46.7 A
35 mm²
30 A
24 A
55 A
23 A
4.5 A
4.5 A 1 A
1 A
1 A 0.4 A
1 A 0.4 A
1 A 0.4 A 0.25 A
1 A 0.4 A 0.25 A 55 A 45 A
1 A 0.4 A 0.25 A 55 A 45 A
1 A 0.4 A 0.25 A 55 A 45 A 45 A 5 A
1 A 0.4 A 0.25 A 55 A 45 A 45 A 5 A 1 A
1 A 0.4 A 0.25 A 55 A 45 A 45 A 5 A
1 A 0.4 A 0.25 A 55 A 45 A 45 A 5 A 1 A 0.8 A
1 A 0.4 A 0.25 A 55 A 45 A 45 A 5 A 1 A 0.8 A
1 A 0.4 A 0.25 A 55 A 45 A 45 A 5 A 1 A 0.8 A
1 A 0.4 A 0.25 A 55 A 45 A 45 A 1 A 0.8 A
1 A 0.4 A 0.25 A 55 A 45 A 5 A 1 A 0.8 A 55 A 55 A 55 A 55 A
1 A 0.4 A 0.25 A 55 A 45 A 45 A 5 A 1 A 0.8 A

at 24 V rated value	2F A
— at 24 V rated value	35 A
— at 60 V rated value	6.4
— at 220 V rated value	1.4
— 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 60 V rated value	45 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 60 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	37 kW
• at AC-3	
— at 230 V rated value	22 kW
— at 400 V rated value	37 kW
— at 500 V rated value	37 kW
— at 690 V rated value	45 kW
• at AC-3e	
— at 230 V rated value	22 kW
— at 400 V rated value	37 kW
— at 500 V rated value	37 kW
— at 690 V rated value	45 kW
operating power for approx. 200000 operating cycles at AC-	
4	
 at 400 V rated value 	15.8 kW
at 690 V rated value	21.8 kW
operating apparent power at AC-6a	
 up to 230 V for current peak value n=20 rated value 	27.8 kVA
 up to 400 V for current peak value n=20 rated value 	48.4 kVA
 up to 500 V for current peak value n=20 rated value 	60.6 kVA
 up to 690 V for current peak value n=20 rated value 	69.3 kVA
operating apparent power at AC-6a	
• up to 230 V for current peak value n=30 rated value	18.6 kVA
• up to 400 V for current peak value n=30 rated value	32.3 kVA
• up to 500 V for current peak value n=30 rated value	40.4 kVA
• up to 690 V for current peak value n=30 rated value	55.8 kVA
short-time withstand current in cold operating state up to	
40 °C	
 limited to 1 s switching at zero current maximum 	1 298 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	898 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	640 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	414 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 60 s switching at zero current maximum 	333 A; Use minimum cross-section acc. to AC-1 rated value
	,
no-load switching frequency	
no-load switching frequency • at AC	5 000 1/h
• at AC	
• at AC operating frequency	5 000 1/h
at AC operating frequency at AC-1 maximum	5 000 1/h 700 1/h
at AC operating frequency at AC-1 maximum at AC-2 maximum	5 000 1/h 700 1/h 350 1/h
 at AC operating frequency at AC-1 maximum at AC-2 maximum at AC-3 maximum 	5 000 1/h 700 1/h 350 1/h 500 1/h
 at AC operating frequency at AC-1 maximum at AC-2 maximum at AC-3 maximum at AC-3 e maximum 	5 000 1/h 700 1/h 350 1/h 500 1/h

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	120 V
operating range factor control supply voltage rated value of magnet coil at AC	
• at 50 Hz	0.8 1.1
• at 60 Hz	0.8 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	
• 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	1
number of NO contacts for auxiliary contacts instantaneous contact	1
operational current at AC-12 maximum	10 A
operational current at AC-15	
• at 230 V rated value	10 A
• at 400 V rated value	3 A
• at 500 V rated value	2 A
at 690 V rated value	1 A
operational current at DC-12	
• at 24 V rated value	10 A
• at 48 V rated value	6 A
• at 60 V rated value	6 A
• at 110 V rated value	3 A
• at 125 V rated value	2 A
at 220 V rated value	1 A
• at 600 V rated value	0.15 A
at 600 V rated value operational current at DC-13	
operational current at DC-13	0.15 A
operational current at DC-13 • at 24 V rated value	0.15 A 10 A
 operational current at DC-13 at 24 V rated value at 48 V rated value 	0.15 A 10 A 2 A
 operational current at DC-13 at 24 V rated value at 48 V rated value at 60 V rated value 	0.15 A 10 A 2 A 2 A
 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 	0.15 A 10 A 2 A 2 A 1 A
 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 125 V rated value 	0.15 A 10 A 2 A 2 A 1 A 0.9 A
 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 125 V rated value at 220 V rated value 	0.15 A 10 A 2 A 2 A 1 A 0.9 A 0.3 A
operational current at DC-13 o 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	0.15 A 10 A 2 A 2 A 1 A 0.9 A 0.3 A 0.1 A
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 125 V rated value • at 220 V rated value • at 600 V rated value • at food V rated value	0.15 A 10 A 2 A 2 A 1 A 0.9 A 0.3 A 0.1 A
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 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at Keyport of the contacts of the contact reliability of auxiliary contacts UL/CSA ratings	0.15 A 10 A 2 A 2 A 1 A 0.9 A 0.3 A 0.1 A
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 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value tontact reliability of auxiliary contacts UL/CSA ratings full-load current (FLA) for 3-phase AC motor	0.15 A 10 A 2 A 2 A 1 A 0.9 A 0.3 A 0.1 A 1 faulty switching per 100 million (17 V, 1 mA)
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 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value contact reliability of auxiliary contacts UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value	0.15 A 10 A 2 A 2 A 1 A 0.9 A 0.3 A 0.1 A 1 faulty switching per 100 million (17 V, 1 mA)
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 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value contact reliability of auxiliary contacts UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value	0.15 A 10 A 2 A 2 A 1 A 0.9 A 0.3 A 0.1 A 1 faulty switching per 100 million (17 V, 1 mA)
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 125 V rated value • at 220 V rated value • at 600 V rated value contact reliability of auxiliary contacts UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value vielded mechanical performance [hp]	0.15 A 10 A 2 A 2 A 1 A 0.9 A 0.3 A 0.1 A 1 faulty switching per 100 million (17 V, 1 mA)

- of 230 V raide value 15 kp 20 kp			
	— at 230 V rated value	15 hp	
al 220/230 V rated value at 4704/80 V rated value 60 hp -	 for 3-phase AC motor 		
at 400-400 V related value at 575600 V related value at 575600 V related value contact rating of auxiliary contracts according to UL Short-circuit protection design of the rise link for short-circuit protection of the main circuit with type of assignment 2 required	 at 200/208 V rated value 	20 hp	
— at 575000 V related value	— at 220/230 V rated value	25 hp	
contact rating of auxiliary contacts according to U. AS00 / P800 Short-circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of assignment 2 required — side-by-side mounting dimensions mounting position fastening method • aide-by-side mounting — the light — the light — the light — the light — the side — upwards — upwards — upwards — downwards — of grounded parts — forwards — at the side — downwards — of rowards — at the side — downwards — to wards — to war	 — at 460/480 V rated value 	50 hp	
Short-circuit protection design of the fuse link	— at 575/600 V rated value	60 hp	
design of the fuse link for short-circular protection of the main circuit — with type of coordination 1 required — with type of coordination 1 required — with type of assignment 2 required — of short-circular protection of the auxiliary switch required Installation mounting position fastening mothod — side-by-side mounting — side-by-side mounting — side-by-side mounting — with side by-side mounting — with side by-side mounting — forwards — upwards — at the side — downwards — of rewards — at the side — downwards — of rive parts — forwards — to main current circuit — downwards — to main — to main current circuit — downwards — to main — to main current circuit — of main current circuit — of magnet cool — side or stranded — inley stranded with core end processing — solid or stranded — for AWC cables for auxiliary contacts — for availiary contacts — for availiary contacts — for AWC cables for auxiliary contacts — for availiary contacts — for AWC cables for auxiliary contacts — for AWC cables for auxiliary contacts — for availiary contacts — for availi	contact rating of auxiliary contacts according to UL	A600 / P600	
• for short-sircult 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 mounting posterion fastenialization mounting dimensions mounting posterion fastenialization mounting general switch sequence of the standing on horizontal mounting surface screw and shap-on mounting onto 35 mm DIN rail according to DIN EN 60715 • side-by-side mounting • with side-by-side mounting • wit	Short-circuit protection		
— with type of coordination 1 required A A See A Se	design of the fuse link		
- with type of assignment 2 required for short-circuit protection of the auxiliary switch required nounting position fastening method side-by-side mounting height width for provided spacing - with side-by-side mounting - forwards - upwards - downwards - at the side - at the side - at the side - downwards - if the parts - forwards - upwards - if the side - downwards - if or live parts - forwards - upwards - if or live parts - forwards - if or subliary and control circuit - if or auxiliary and control circuit - if or subliary and	for short-circuit protection of the main circuit		
with type of assignment 2 required • for short-circuit protection of the auxiliary switch required Installation mounting dimensions mounting position fastening method • side-by-side mounting • side-by-side mounting to fastening method • side-by-side mounting with side-by-side mounting to fastening method to fastening metho	— with type of coordination 1 required		
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mounting position featening method side-by-side mounting width depth width depth - If			
mounting position fastening method sorew and snap-on mounting surface sorew and snap-on mounting auritace sorew and snap-on mounting auritace sorew and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 year height 114 mm width 55 mm depth 130 mm required spacing with side-by-side mounting — forwards — upwards — ownwards — ownwards — at the side — ownwards — ownwards — inowards — upwards — inowards — upwards — ownwards — of mm — ownwards — of mm — ownwards		90. 1077(000 1, 1101)	
### Serew and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 ### side-by-side mounting ### width ### depth ### 130 mm required spacing ### with side-by-side mounting ### own side by-side moun		ctanding on harizantal mounting ourface	
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Neight 114 mm width	-		
width depth 130 mm required spacing • with side-by-side mounting — forwards 10 mm — downwards 10 mm — at the side 0 mm — orwards 10 mm — upwards 10 mm — upwards 10 mm — upwards 10 mm — at the side 6 mm — downwards 10 mm — at the side 6 mm — downwards 10 mm — orwards 10 mm — at the side 6 mm — downwards 10 mm — at the side 6 mm — downwards 10 mm — orwards 10 mm — at the side 6 mm — orwards 10 mm — at the side 5 mm — orwards 10 mm — at the side 6 mm Connections' Terminals type of electrical connection • for main current circuit screw-type terminals screw-type terminals • of a auxiliary and control circuit screw-type terminals • of a side or stranded (2x (1 35 mm²), 1x (1 50 mm²) connectable conductor cross-section for main contacts • finely stranded with core end processing (2x (1 25 mm²), 1x (1 35 mm²) type of connectable conductor cross-section for main contacts • finely stranded with core end processing (3 2.5 mm²) tinely stranded with core end processing (5 2.5 mm²) finely stranded with core end processing (5 2.5 mm²) finely stranded with core end processing (5 2.5 mm²) finely stranded with core end processing (5 2.5 mm²) finely stranded with core end processing (5 2.5 mm²) for auxiliary contacts • for auxiliary contacts • for for WiG cables for auxiliary contacts • for for WiG cables for auxiliary contacts • for AWG number as coded connectable conductor cross-sections • for for main contacts • for for wide cable conductor cross-sections • for main contacts • for for main contacts • for main contacts	·		
required spacing • with side-by-side mounting — forwards — upwards — downwards — at the side • for grounded parts — forwards — 10 mm — ownerds — upwards — ownerds — 10 mm — ownerds — upwards — ownerds — 10 mm — ownerds — own			
required spacing with side-by-side mounting - forwards - upwards - downwards - at the side - for grounded parts - forwards - upwards - the side - for grounded parts - forwards - upwards - 10 mm - upwards - 10 mm - upwards - 10 mm - at the side - downwards - for live parts - forwards - upwards - forwards - upwards - downwards - upwards - downwards - the side - forwards - downwards - the side - for main current circuit - for auxiliary and control circuit - for auxiliary and control circuit - for auxiliary contacts - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - for auxiliary contacts - solid or stranded - finely stranded with core end processing - for far auxiliary contacts - solid or stranded - finely stranded with core end processing - for far auxiliary contacts - solid or stranded - finely stranded with core end processing - for far auxiliary contacts - solid or stranded - finely stranded with core end processing - for auxiliary contacts - solid or stranded - finely stranded with core end processing - for auxiliary contacts - solid or stran			
with side-by-side mounting	·	130 mm	
forwards	required spacing		
- upwards	 with side-by-side mounting 		
- downwards - at the side • for grounded parts - forwards - upwards - at the side - downwards - at the side - downwards - at the side - downwards - to live parts - forwards - upwards - to live parts - forwards - upwards - upwards - upwards - upwards - downwards - upwards - downwards - downwards - downwards - at the side - domnoutcons/ Torminals type of electrical connection • for main current circuit • at contactor for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections 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 • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing - for auxiliary contacts - solid or stranded - finely stranded with core end processing - for auxiliary contacts - solid or stranded - finely stranded with core end processing - for auxiliary contacts - for auxiliary cont	— forwards	10 mm	
- at the side • for grounded parts - forwards - upwards - at the side - downwards • for live parts - forwards - upwards • for live parts - forwards - upwards - forwards - upwards - forwards - upwards - upwards - downwards - downwards - downwards - downwards - at the side - formards - downwards - downwards - at the side - formal connections • for main current circuit • for auxiliary and control circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil type of connectable conductor cross-sections for main contacts • 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 contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts - solid or stranded • finely stranded with core end processing connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - for auxiliary contacts - for main contacts • for main contacts • for auxiliary contacts - for main contacts • for auxiliary contacts - for main contacts • for main contacts • for main contacts • for main contacts • for auxiliary contacts - for main co	— upwards	10 mm	
• for grounded parts — forwards — upwards — at the side — downwards • for live parts — forwards • for live parts — forwards — upwards — upwards — upwards — upwards — downwards — 10 mm — upwards — 10 mm — downwards — 10 mm — of main current circuit — for auxiliary and control circuit • for auxiliary and control circuit • for auxiliary contacts • solid or stranded • finely stranded with core end processing • finely stranded with core end processing • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-section for main contacts • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - finely stranded with core end processing - solid or stranded - solid or stranded - solid or stranded - soli	— downwards	10 mm	
forwards	— at the side	0 mm	
- upwards	for grounded parts		
- at the side — downwards 10 mm • for live parts - forwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 10 mm - downwards 6 mm - downwards 10 mm - downwards 10 mm - downwards 6 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 • of magnet coil Screw-type terminals type of connectable conductor cross-sections for main contacts • solid or stranded 2x (1 35 mm²), 1x (1 50 mm²) connectable conductor cross-section for main contacts • finely stranded with core end processing 1 35 mm² connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing 0.5 2.5 mm² type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) • for AWC cables for auxiliary contacts 2x (20 16), 2x (18 14) AWG number as coded connectable conductor cross-section • for main contacts • for auxiliary contacts - for or main contacts • for auxiliary contacts • for auxiliary contacts - for main contacts • for main contacts • for auxiliary contacts - for or main contacts • for auxiliary contacts - for or main contacts - for auxiliary contacts - for main contacts - for auxiliary contacts	— forwards	10 mm	
- downwards • for live parts - forwards - upwards - upwards - downwards - at the side Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • for auxiliary contacts • of magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • 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 contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing - for auxiliary contacts - solid or stranded - finely stranded with core end processing - for auxiliary contacts	— upwards	10 mm	
- downwards • for live parts - forwards - upwards - upwards - downwards - at the side Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • for auxiliary contacts • of magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • 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 contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing - for auxiliary contacts - solid or stranded - finely stranded with core end processing - for auxiliary contacts	— at the side	6 mm	
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- forwards - upwards - downwards - downwards - at the side Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • for magnet coil type of connectable conductor cross-sections for main contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for main incontacts • finely stranded with core end processing connectable conductor cross-section for auxiliary 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 contacts • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • finely stranded with core end processing connectable conductor cross-sections • for auxiliary contacts • for auxiliary contacts - solid or stranded - finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) • for AWG cables for auxiliary contacts 2x (20 1.5 mm²), 2x (0.75 2.5 mm²) • for AWG cables for auxiliary contacts • for main contacts • for main contacts • for main contacts • for main contacts • for main contacts • for main contacts • for auxiliary contacts 20 18 1			
- upwards	•	10 mm	
- downwards - at the side Connections/ Terminals type of electrical connection			
- 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 • of magnet coil Screw-type terminals • of magnet coil Screw-type terminals • of magnet coil Screw-type terminals • solid or stranded • 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 contacts • solid or stranded • finely stranded with core end processing connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for main contacts • for auxiliary contacts - for auxiliary contacts • for auxiliary contacts - for auxiliary contacts	·		
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• for auxiliary contacts 20 14	section		
·			
Safety related data	·	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 a
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
suitability for use	
safety-related switching OFF	Yes

Certificates/ approvals

General Product Approval





Confirmation



<u>KC</u>



EMC	Functional Safety/Safety of Ma- chinery	Declaration of Conformity	Test Certificates
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Type Examination Certificate





Special Test Certificate

Type Test Certificates/Test Report

Marine / Shipping













Marine / Shipping	other	Railway	Dangerous Good



Confirmation

Confirmation

Vibration and Shock

Transport Information

Further information

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

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

Siemens is working on the renewal of the current EAC certificates.

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

Information on the packaging

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

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

 $\underline{https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2038-1AK60-1AA0}$

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2038-1AK60-1AA0

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

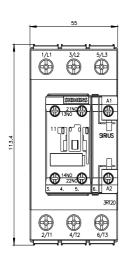
https://support.industry.siemens.com/cs/ww/en/ps/3RT2038-1AK60-1AA0

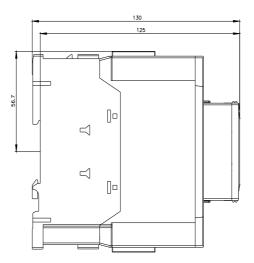
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

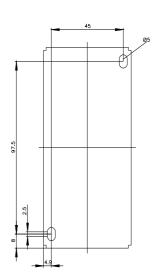
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2038-1AK60-1AA0\&lang=en}}$

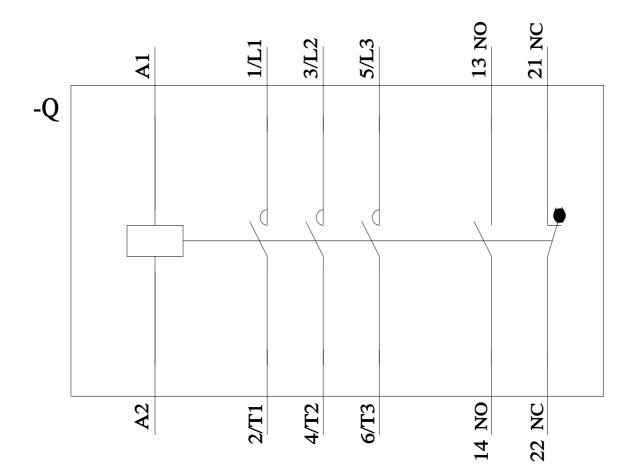
Characteristic: Tripping characteristics, I²t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT2038-1AK60-1AA0/char Further characteristics (e.g. electrical endurance, switching frequency)









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