SIEMENS

Data sheet

3RT2017-2KB42-0LA0



traction contactor, AC-3e/AC-3, 12 A, 5.5 kW / 400 V, 3-pole, 24 V DC, 0.7-1.25* Us, with integrated suppressor diode, auxiliary contacts: 1 NC, spring-loaded terminal, size: S00, with plugged on series resistor

product brand name	SIRIUS
product designation	Power contactor
design of the product	With extended operating range
product type designation	3RT2
General technical data	
size of contactor	S00
product extension	
 function module for communication 	No
auxiliary switch	Yes
power loss [W] for rated value of the current	
 at AC in hot operating state 	3.6 W
 at AC in hot operating state per pole 	1.2 W
 without load current share typical 	4 W
type of calculation of power loss depending on pole	quadratic
insulation voltage	
 of main circuit with degree of pollution 3 rated value 	690 V
 of auxiliary circuit with degree of pollution 3 rated value 	690 V
surge voltage resistance	
 of main circuit rated value 	6 kV
 of auxiliary circuit rated value 	6 kV
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at DC	7.3g / 5 ms, 4.7g / 10 ms
shock resistance with sine pulse	
• at DC	11,4g / 5 ms, 7,3g / 10 ms
mechanical service life (operating cycles)	
 of contactor typical 	30 000 000
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000
 of the contactor with added auxiliary switch block typical 	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
SVHC substance name	Lead - 7439-92-1
Weight	0.347 kg
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
during operation	-40 +70 °C
during storage	-55 +80 °C
relative humidity minimum	10 %

relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
Environmental footprint	
	Vee
Environmental Product Declaration(EPD)	Yes
global warming potential [CO2 eq] total	153 kg
global warming potential [CO2 eq] during manufacturing	1.42 kg
global warming potential [CO2 eq] during operation	152 kg
global warming potential [CO2 eq] after end of life	-0.305 kg
Main circuit	<u>^</u>
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	000.1/
at AC-3 rated value maximum	690 V
at AC-3e rated value maximum	690 V
operational current	
 at AC-1 at 400 V at ambient temperature 40 °C rated value 	22 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated	22 A
value	
— up to 690 V at ambient temperature 60 °C rated value	20 A
• at AC-2 at 400 V rated value	12 A
• at AC-3	
— at 400 V rated value	12 A
— at 500 V rated value	9.2 A
— at 690 V rated value	6.7 A
• at AC-3e	
— at 400 V rated value	12 A
— at 500 V rated value	9.2 A
— at 690 V rated value	6.7 A
 at AC-4 at 400 V rated value 	8.5 A
minimum cross-section in main circuit	
 at maximum AC-1 rated value 	4 mm ²
operational current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	4.1 A
at 690 V rated value	3.3 A
operational current	
• at 1 current path at DC-1	
— at 24 V rated value	20 A
— at 110 V rated value	2.1 A
— at 220 V rated value	0.8 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.6 A
 with 2 current paths in series at DC-1 	
— at 24 V rated value	20 A
— at 110 V rated value	12 A
— at 220 V rated value	1.6 A
— at 440 V rated value	0.8 A
— at 600 V rated value	0.7 A
 with 3 current paths in series at DC-1 	
— at 24 V rated value	20 A
— at 110 V rated value	20 A
— at 220 V rated value	20 A
— at 440 V rated value	1.3 A
— at 600 V rated value	1 A
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	20 A
— at 110 V rated value	0.1 A
• with 2 current paths in series at DC-3 at DC-5	
— at 24 V rated value	20 A

— at 110 V rated value	0.35 A
 with 3 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	20 A
— at 110 V rated value	20 A
— at 220 V rated value	1.5 A
— at 440 V rated value	0.2 A
— at 600 V rated value	0.2 A
operating power	
 at AC-2 at 400 V rated value 	5.5 kW
• at AC-3	
— at 230 V rated value	3 kW
— at 400 V rated value	5.5 kW
— at 500 V rated value	5.5 kW
— at 690 V rated value	5.5 kW
• at AC-3e	
— at 230 V rated value	3 kW
— at 400 V rated value	5.5 kW
— at 500 V rated value	5.5 kW
— at 690 V rated value	5.5 kW
operating power for approx. 200000 operating cycles at AC-	
4	
• at 400 V rated value	2 kW
• at 690 V rated value	2.5 kW
short-time withstand current in cold operating state up to	
40 °C	
 limited to 1 s switching at zero current maximum 	200 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	123 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	96 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	74 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 60 s switching at zero current maximum 	61 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at DC	1 500 1/h
operating frequency	
 at AC-2 at AC-3e maximum 	750 1/h
● at AC-4 maximum	250 1/h
Control circuit/ Control	
type of voltage	DC
type of voltage of the control supply voltage	DC
control supply voltage at DC rated value	24 V
operating range factor control supply voltage rated value of	
magnet coil at DC	
magnet coil at DCinitial value	0.7
magnet coil at DC initial value full-scale value 	1.25
magnet coil at DC initial value full-scale value design of the surge suppressor	1.25 suppressor diode
magnet coil at DC • initial value • full-scale value design of the surge suppressor closing power of magnet coil at DC	1.25 suppressor diode 13 W
magnet coil at DC • initial value • full-scale value design of the surge suppressor closing power of magnet coil at DC holding power of magnet coil at DC	1.25 suppressor diode
magnet coil at DC • initial value • full-scale value design of the surge suppressor closing power of magnet coil at DC holding power of magnet coil at DC closing delay	1.25 suppressor diode 13 W 4 W
magnet coil at DC • initial value • full-scale value design of the surge suppressor closing power of magnet coil at DC holding power of magnet coil at DC	1.25 suppressor diode 13 W
magnet coil at DC • initial value • full-scale value design of the surge suppressor closing power of magnet coil at DC holding power of magnet coil at DC closing delay	1.25 suppressor diode 13 W 4 W 25 130 ms
magnet coil at DC • initial value • full-scale value design of the surge suppressor closing power of magnet coil at DC holding power of magnet coil at DC closing delay • at DC	1.25 suppressor diode 13 W 4 W
magnet coil at DC • initial value • full-scale value design of the surge suppressor closing power of magnet coil at DC holding power of magnet coil at DC closing delay • at DC opening delay	1.25 suppressor diode 13 W 4 W 25 130 ms
magnet coil at DC • initial value • full-scale value design of the surge suppressor closing power of magnet coil at DC holding power of magnet coil at DC closing delay • at DC opening delay • at DC	1.25 suppressor diode 13 W 4 W 25 130 ms 7 20 ms
magnet coil at DC • initial value • full-scale value design of the surge suppressor closing power of magnet coil at DC holding power of magnet coil at DC closing delay • at DC opening delay • at DC arcing time	1.25 suppressor diode 13 W 4 W 25 130 ms 7 20 ms 10 15 ms
magnet coil at DC • initial value • full-scale value design of the surge suppressor closing power of magnet coil at DC holding power of magnet coil at DC closing delay • at DC opening delay • at DC arcing time control version of the switch operating mechanism	1.25 suppressor diode 13 W 4 W 25 130 ms 7 20 ms 10 15 ms
magnet coil at DC • initial value • full-scale value design of the surge suppressor closing power of magnet coil at DC holding power of magnet coil at DC closing delay • at DC opening delay • at DC arcing time control version of the switch operating mechanism Auxiliary circuit	1.25 suppressor diode 13 W 4 W 25 130 ms 7 20 ms 10 15 ms E1 - A2
magnet coil at DC • initial value • full-scale value design of the surge suppressor closing power of magnet coil at DC holding power of magnet coil at DC closing delay • at DC opening delay • at DC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts	1.25 suppressor diode 13 W 4 W 25 130 ms 7 20 ms 10 15 ms E1 - A2
magnet coil at DC • initial value • full-scale value design of the surge suppressor closing power of magnet coil at DC holding power of magnet coil at DC closing delay • at DC opening delay • at DC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts operational current at AC-12 maximum	1.25 suppressor diode 13 W 4 W 25 130 ms 7 20 ms 10 15 ms E1 - A2
magnet coil at DC • initial value • full-scale value design of the surge suppressor closing power of magnet coil at DC holding power of magnet coil at DC closing delay • at DC opening delay • at DC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts operational current at AC-12 maximum operational current at AC-15	1.25 suppressor diode 13 W 4 W 25 130 ms 7 20 ms 10 15 ms E1 - A2 1 10 A
magnet coil at DC • initial value • full-scale value design of the surge suppressor closing power of magnet coil at DC holding power of magnet coil at DC closing delay • at DC opening delay • at DC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value	1.25 suppressor diode 13 W 4 W 25 130 ms 7 20 ms 10 15 ms E1 - A2 1 10 A 10 A
magnet coil at DC • initial value • full-scale value design of the surge suppressor closing power of magnet coil at DC holding power of magnet coil at DC closing delay • at DC opening delay • at DC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value	1.25 suppressor diode 13 W 4 W 25 130 ms 7 20 ms 10 15 ms E1 - A2 1 10 A 10 A 3 A
magnet coil at DC • initial value • full-scale value design of the surge suppressor closing power of magnet coil at DC holding power of magnet coil at DC closing delay • at DC opening delay • at DC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 500 V rated value	1.25 suppressor diode 13 W 4 W 25 130 ms 7 20 ms 10 15 ms E1 - A2 1 10 A 3 A 2 A

••••••••••••••••••••••••••••••••••••		
• A A• A HO Vider valueA• at 125 V rates value2 A• at 220 V rates value2 A• at 000 V rates value0.15 Aoperational current at DC-13•• at 24 V rates value10 A• at 24 V rates value2 A• at 24 V rates value2 A• at 24 V rates value0.5 A• at 25 V rates value0.5 A• at 25 V rates value0.5 A• at 26 V rates value0.5 A• at 26 V rates value0.5 A• at 200 V rates value0.5 Bp- at 200 205 V rates value0.5 Bp- at 200 205 V rates value3 Dp- at 200 205 V rates value3	at 24 V rated value	10 A
• A• • 110 Yraid valueA• • 120 Yraid value1A• • 120 Yraid value1A• • 120 Yraid value0.15 A• • 121 A Yraid value1A• • 121 A Yraid value2A• • 121 A Yraid value2A• • 121 A Yraid value0.9 A• • • 121 A Yraid value0.9 A• • • • 121 A Yraid value0.9 A• • • • • • • • • • • • • • • • • • •	• at 48 V rated value	6 A
41 25 V tried value 2 A • • # 250 V ried value 0.15 A opprational current at DC-13 0 • • #14 V rinde value 2 A • • #14 V rinde value 2 A • • #14 V rinde value 0.5 A • • #14 V rinde value 2 A • • #14 V rinde value 0.5 A • • #15 V rinde value 0.5 A • • #160 V rinde value 11 A • • #160 V rinde value 12 A • • #160 V rinde value 13 A • • #160 V rinde value 14 A • • #160 V rinde value 15 A • • #160 V rinde value 14 A • • #160 V rinde value 14 A • • #160 V rinde value 15 A • • • #160 V rinde value 15 A • • #160 V rinde value 16 A • • #160 V rinde value 16 A • • • #160 V rinde value 16 A • • • • • • • • • • • • • • • • • • •	 at 60 V rated value 	6 A
• at 220 V rates value1 A• at 220 V rates value0.15 A• at 24 V rates value10 A• at 24 V rates value10 A• at 25 V rates value2 A• at 45 V rates value2 A• at 45 V rates value1 A• at 15 V rates value0.9 A• at 15 V rates value0.9 A• at 25 V rates value0.9 A• at 250 V rates value1 A• at 260 V rates value1 A• at 260 V rates value1 A• at 260 V rates value2 Np• at 260 V rates value2 Np• at 260 V rates value3 Np• at 260 V rates value <td> at 110 V rated value </td> <td>3 A</td>	 at 110 V rated value 	3 A
• 1800 V tatk value0.15 Aoperational current at DC-13•• 1.21 V radio Value10 A• 1.81 V radio Value2 A• 1.81 V radio Value0.5 A• 1.81 V radio Value0.6 A• 1.81 V radio Value0.3 A• 1.81 V radio Value0.3 A• 1.81 V radio Value0.1 A• 1.81 V radio Value11 A• 1.81 V radio Value11 A• 1.81 V radio Value12 A• 1.81 V radio Value13 A• 1.81 V radio Value13 A• 1.81 V radio Value0.5 fp	• at 125 V rated value	2 A
operational current at DC-13 9 • at 24 V rated value 10 • at 50 V rind value 2A • at 16 V rind value 2A • at 16 V rind value 0.6A • at 25 V rind value 0.6A • at 26 V rind value 0.6A • at 260 V rind value 0.7A • at 260 V rind value 11A • at 260 V rind value 11A • at 260 V rind value 11A • at 260 V rind value 12A • provide value 0.5 hp - at 200206 V rind value 2 hp - at 200206 V rind value 3 hp - at 200206 V rind value 3 hp - at 200206 V rind value 3 hp - at 200208	• at 220 V rated value	1 A
n10 Aa 12 AV pred value2 Aa 16 UV radi value2 Aa 17 UV radi value1 Aa 17 12 V radi value0.5 Aa 17 12 V radi value0.3 Aa 17 12 V radi value1 Aa 17 12 V radi value1 Aa 17 10 V radi value0.5 hp- a 12 30 V radi value2 hp- a 12 30 V radi value3 hp- a 14 500 R radi value7.5 hp- a 14 500 R radi value7.5 hp- a 15 75160 V radi value9.6 10 A (600V 100A), ab: 13 A (at 600 V rated value 	0.15 A
4.4 Viried value 2.A at 60 Virated value 2.A at 110 Victod value 0.A at 128 Virated value 0.3.A at 260 Virated value 0.3.A at 260 Virated value 0.1.A at 480 Virated value 11.A at 480 Virated value 11.A at 600 Virated value 11.A at 700 Virated value 2.hp i or single-phase AC motor - - at 101/320 Virated value 2.hp i or single-phase AC motor - - at 200200 Virated value 3.hp - at 400480 Virated value 7.6 hp - at 400480 Virated value 7.6 hp - at 400480 Virated value 3.hp - at 400	operational current at DC-13	
4.4 Viried value 2.A at 60 Virated value 2.A at 110 Victod value 0.A at 128 Virated value 0.3.A at 260 Virated value 0.3.A at 260 Virated value 0.1.A at 480 Virated value 11.A at 480 Virated value 11.A at 600 Virated value 11.A at 700 Virated value 2.hp i or single-phase AC motor - - at 101/320 Virated value 2.hp i or single-phase AC motor - - at 200200 Virated value 3.hp - at 400480 Virated value 7.6 hp - at 400480 Virated value 7.6 hp - at 400480 Virated value 3.hp - at 400	at 24 V rated value	10 A
 at 60 Y raide value 1A 11 10 Y raide value 12 20 Y raide value 13 A at 80 Y raide value 14 A at 80 Y raide value 16 A at 80 Y raide value 17 A at 80 Y raide value 18 A at 80 Y raide value 19 A at 80 Y raide value 11 A at 80 Y raide value 19 A at 80 Y raide value 10 Fig at 800 Y raide value 10 Fig at 90 Y raide value 10 Fig at 90 Fig at 90 Fig 10 Fig at 90 Fig 10 Fig	at 48 V rated value	2 A
• at 110 Vrated value 1 A • at 225 Vrated value 0.9 A • at 220 Vrated value 0.1 A • at 260 Vrated value 0.1 A • at 260 Vrated value 11 A • at 460 Vrated value 11 A • at 460 Vrated value 11 A • at 460 Vrated value 11 A • at 600 Vrated value 11 A • at 200 Vrated value 0.5 Fp • at 200 Vrated value 0.5 Fp • at 200 Vrated value 0.5 Fp • at 200 Vrated value 3 hp • at 200208 Vrated value 3 hp • at 200208 Vrated value 10 hp • at 1004080 Vrated value 10 hp		
• at 125 V rated value0.9 Å 0.3 Å• at 020 V rated value0.3 Å• at 030 V rated value0.1 ÅUUC5A value11 Å• at 680 V rated value0.5 hp- at 1200 ZB V rated value2 hp• at 230 V rated value3 hp- at 230 V rated value7.5 hp- at 230 V rated value7.5 hp- at 230 V rated value7.5 hp- at 230 V rated value7.6 hp- at 65600 V rated value7.6 hp- at 67600 V rated value9.6 to 60.0 fo00Short-Cricat protectionModosign of the fuse link-• for stort-Cricat protection 1 required9.6 to 64.690V, 100kÅ), atf. 20A (690V, 100kÅ), BS8: 35A (415V, 80kÅ)• for stort-Cricat protection 1 required9.6 to 64.690V, 100kÅ), atf. 20A (690V, 100kÅ), BS8: 35A (415V, 80kÅ)• for stort-Cricat protection 1 required9.6 to 64.690V, 100kÅ), atf. 20A (690V, 100kÅ), BS8: 35A (415V, 80kÅ)• for stort-Cricat protection 1 required9.6 to 64.690V, 100kÅ), atf. 20A (690V, 100kÅ), BS8: 35A (415V, 80kÅ)• for stort-Cricat protection 1 required9.6 to 64.690V, 100kÅ), atf. 20A (690V, 100kÅ), BS8: 35A (415V, 80kÅ)• for stort-Gricat protection9.6 to 64.690V, 100kÅ), atf. 20A (690V, 100kÅ), BS		
• al 220 V rated value 0.3 Å • al 600 V rated value 0.1 Å • di 600 V rated value 11 Å • al 480 V rated value 11 Å • al 600 V rated value 11 Å • of an ingle phase AC motor 11 Å • of an ingle phase AC motor 11 Å • of an ingle phase AC motor 11 Å • of an ingle phase AC motor 2 hp • of an ingle phase AC motor 3 hp • at 200200 V rated value 10 hp • at 800 V rated value<		
uitCSA rankags UitCSA rankags UitCSA rankags UitCSA rankags uit 480 V rated value 11 A • at 800 V rated value 11 A vitat value 11 A yielded mechanical performance (hp)		
ULCSA ratings full-da current (FLA) for 3-phase AC motor • at 400 V rated value 11 A • at 400 V rated value 11 A if 400 V rated value 11 A • full-date channes (Pp) • for single-phase AC motor - at 100 120 V rated value 0.5 hp - at 200280 V rated value 2 hp • for 3-phase AC motor 3 hp - at 220230 V rated value 3 hp - at 220230 V rated value 3 hp - at 220230 V rated value 7.5 hp - at 5000 V rated value 10 hp contact rating of auxiliary contacts according to UL A600 / 0800 50n+1-circuit protection No design of the fuse link - • for short-circuit protection of the main circuit - - with type of assignment 2 required gG: 50A (680V, 100kA), aM: 20A (680V, 100kA), BS8: 35A (415V, 80kA) • for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 100kA), aM: 20A (680V, 100kA), BS8: 20A (15V, 80kA) • for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 100kA), aM: 20A (680V, 100kA), BS8: 20A (415V, 80kA) • for short-circuit protection of the auxil		
full-load current (FLA) for 3-phase AC motor • at 480 V rated value 11 A • at 600 V rated value 11 A • for single-phase AC motor - • for single-phase AC motor - • at 200 V rated value 2 hp • for single-phase AC motor - • at 2002/20 V rated value 3 hp - at 2002/20 V rated value 3 hp - at 2002/20 V rated value 3 hp - at 2002/20 V rated value 7.6 hp - at 2002/20 V rated value 7.6 hp - at 57/600 V rated value 9.6 50A (600 V, 100kA), aM: 20A (600 V, 100kA), BS88: 35A (415V, 80KA) g6: 10 A (600 V, 100kA), aM: 16A (690 V, 100kA), BS88: 35A (415V, 80KA) 9.6 50A (600 V, 100kA), aM: 16A (690 V, 100kA), BS88: 20A (415V, 80KA) - with type of assignment 2 required 9.6 50A (600 V, 100kA), aM: 16A (690 V, 100kA), BS88: 35A (415V, 80KA) efor stort-circui protection of the main circuit 9.7 for troation possible on vertical mounting surface; can be titled forward and backward		0.1 A
• at 600 V rated value 11 A yielded mechanical performance [ty] Image: state of the state of t		
yielded mechanical performance (hp) for single-phase AC motor at 101/320 Vitated value bt or 3-phase AC motor at 230 V rated value 2 hp for 3-phase AC motor at 200208 V rated value 3 hp at 220123 V rated value 3 hp at 220123 V rated value 3 hp at 220123 V rated value 3 hp at 575/600 V rated value 75 fp at 575/600 V rated value 75 hp at 575/600 V rated value 75 hp at 575/600 V rated value 76 hp at 575/600 V rated value 76 hp at 575/600 V rated value 76 hp bot c-circut protection		
for single-phase AC motor - at 110/120 V rated value 2 hp - at 230 V rated value 2 hp - for 3-phase AC motor - at 2200230 V rated value 3 hp - at 220230 V rated value 3 hp - at 220230 V rated value 3 hp - at 420480 V rated value 75 hp - at 450480 V rated value 75 hp - at 575600 V rated value 0 hp - or stort-circuit protection Short-circuit protection of the main circuit - with type of coordination 1 required - or short-circuit protection of the main circuit - with type of coordination 1 required - or short-circuit protection of the main circuit - with type of coordination 1 required - or short-circuit protection of the main circuit - with type of coordination 1 required - or short-circuit protection of the main circuit - with type of coordination 1 required - or short-circuit protection of the main circuit - with type of coordination 1 required - or short-circuit protection of the main circuit - with type of coordination 1 required - or short-circuit protection of the main circuit - or sh		11 A
- at 110/120 V rated value 0.5 hp - at 230 V rated value 2 hp • for 3-phase AC motor - - at 200208 V rated value 3 hp - at 200208 V rated value 3 hp - at 200208 V rated value 3 hp - at 400480 V rated value 7.5 hp - at 400480 V rated value 7.5 hp - at 575600 V rated value 7.6 hp - at 575600 V rated value 00 hp context rating of auxiliary contexts according to UL. A600 V 2600 Short-circuit protection No design of the fuse link - • for short-circuit protection of the main circuit - - with type of coordination 1 required g6: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) - with type of assignment 2 required g6: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) - with type of assignment 2 required g6: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) - mounting position th> score wand snap-on mounting surface; can be tilted forward and backward by 2+ 225 or on vertical mounting surface; can be tilted forward and backward by 2+ 225 or on vertical mounting surface; can be tilted forward and backward by 2+ 225 or on vertical mounting surface; can be tilted forward and backward by 2+ 225 or on vertical mounting surface; can be tilted forward and backward by 2+ 225 or on vertical mounting surface; can be tilted forward and backward by 2+ 225 or on vertical mounting surf		
		2 hp
	 for 3-phase AC motor 	
	— at 200/208 V rated value	3 hp
	— at 220/230 V rated value	3 hp
contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection No design of the fuse link • • for short-circuit protection of the main circuit gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) - with type of coordination 1 required gG: 50A (690V,100kA), aM: 16A (690V,100kA), BS88: 20A (415V,80kA) • for short-circuit protection of the auxiliary switch required gG: 10 A (600 V, 10kA), aM: 16A (690V, 100kA), BS88: 20A (415V,80kA) Installation/ mounting/ dimensions #/180° rotation possible on vertical mounting surface; can be tilled forward and backward by +/-22.5° on vertical mounting surface; can be tilled forward and backward by +/-22.5° on vertical mounting surface; can be tilled forward and backward by +/-22.5° on vertical mounting surface; can be tilled forward and backward by +/-22.5° on vertical mounting surface; can be tilled forward and backward by +/-22.5° on vertical mounting surface; can be tilled forward and backward by +/-22.5° on vertical mounting surface; can be tilled forward and backward by +/-22.5° on vertical mounting surface; can be tilled forward and backward by +/-22.5° on vertical mounting surface; can be tilled forward and backward by +/-22.5° on vertical mounting surface; can be tilled forward and backward by +/-22.5° on vertical mounting surface; can be tilled forward and backward by +/-22.5° on vertical mounting surface; can be tilled forward and backward by +/-22.5° on vertical mounting surface; can be tilled forward and backward by +/-22.5° on vertical mounting surface; can be tilled forward and backward by +/-22.5° on vertical mounting surface; can be tilled forward and backward by +/-22.5° on vertical mount	— at 460/480 V rated value	7.5 hp
Short-circuit protection No design of the fuse link • for short-circuit protection of the main circuit - with type of coordination 1 required gG: 50A (690V, 100kA), aM: 20A (690V, 100kA), BS88: 35A (415V, 80kA) - with type of assignment 2 required gG: 20A (690V, 100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) - with type of assignment 2 required gG: 10 A (500 V, 100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) - with type of assignment 2 required gG: 10 A (500 V, 100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) - with type of assignment 2 required gG: 10 A (500 V, 100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) - with type of assignment 2 required gG: 10 A (500 V, 100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) - forwardis - with side debet auxiliary switch required fastening method screw and snap-on mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 height 70 mm width 45 mm dopth 121 mm required spacing 0 mm - forwards 0 mm - forwards 10 mm - fo	— at 575/600 V rated value	10 hp
product function short circuit protection No design of the fuse link for short-circuit protection of the main circuit with type of coordination 1 required g6: 50A (690V,100kA), aM: 20A (690V,100kA), BS8B: 35A (415V,80kA) g6: 20A (690V,100kA), aM: 20A (690V,100kA), BS8B: 35A (415V,80kA) g6: 20A (690V,100kA), aM: 16A (690V, 100kA), BS8B: 20A (415V, 80kA) g6: 20A (690V,100kA), aM: 16A (690V, 100kA), BS8B: 20A (415V, 80kA) g6: 10 A (500 V, 1 kA) Installation/mounting/dimensions mounting position fastening method side-by-side mounting	contact rating of auxiliary contacts according to UL	A600 / Q600
design of the fuse link for short-circuit protection of the main circuit with type of coordination 1 required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS8B: 35A (415V,80kA) gG: 50A (690V,100kA), aM: 16A (690V, 100kA), BS8B: 20A (415V, 80kA) gG: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions #/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting to DIN EN 60715 </td <td>Short-circuit protection</td> <td></td>	Short-circuit protection	
for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required G: 50A (690V, 100kA), aM: 20A (690V, 100kA), BS88: 35A (415V, 80kA) — with type of assignment 2 required gG: 50A (690V, 100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) gG: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions Totaling position +/180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward forwards 10 mm - of owards 10 mm - downwards 10 mm - downwards 10 mm - downwards	product function short circuit protection	No
with type of assignment 2 requiredgG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) with type of assignment 2 requiredgG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)• for short-circuit protection of the auxiliary switch requiredgG: 10A (500 V, 1 kA)Installation/mounting/dimensions+/180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward and backward by +/ 22.5° on vertical mounting surface; can be tilted forward a	design of the fuse link	
with type of assignment 2 required gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA) • for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions +/180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface fastening method side-by-side mounting Yes fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 height 70 mm width 45 mm depth 121 mm required spacing - • with side-by-side mounting 10 mm - of orwards 10 mm - of orwards 10 mm - at the side 0 mm - at the side 6 mm - odwnwards 10 mm - downwards 10 m	 for short-circuit protection of the main circuit 	
• for short-circuit protection of the auxiliary switch required gG: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions +/-180° rotation possible on vertical mounting surface; can be tilled forward and backward by +/-22.5° on vertical mounting surface fastening method side-by-side mounting Yes fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 height 70 mm width 45 mm depth 121 mm required spacing - • with side-by-side mounting - - forwards 10 mm - qownwards 0 mm - downwards 10 mm - oforwards 10 mm - forwards 10 mm - downwards 0 mm - forwards 10 mm - downwards 10 mm - downwards 10 mm - downwards 10 mm - downwards 10 mm - forwards 10 mm	 — with type of coordination 1 required 	gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)
Installation/ mounting/ dimensions +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting for tilte bards fastening method 50 mm - forwards 10 mm - at the side 6 mm - downwards 10 mm - forwards 10 mm - forwards 10 mm - downwards 10 mm	 — with type of assignment 2 required 	gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)
mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/-22.5° on vertical mounting surface fastening method side-by-side mounting Yes fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 height 70 mm width 45 mm depth 121 mm required spacing • • with side-by-side mounting 10 mm - forwards 10 mm - at the side 0 mm - forwards 10 mm - at the side 0 mm - at the side 0 mm - at the side 6 mm - at the side 6 mm - downwards 10 mm - at the side 6 mm - at the side 6 mm - downwards 10 mm - downwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 10 mm - downwards 10 mm - upwards 10 mm - downwards	 for short-circuit protection of the auxiliary switch required 	gG: 10 A (500 V, 1 kA)
backward by +/- 22.5° on vertical mounting surface fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 height 70 mm width 45 mm depth 121 mm required spacing - • with side-by-side mounting - - forwards 10 mm - upwards 10 mm - at the side 0 mm - forwards 10 mm - at the side 0 mm - forwards 10 mm - at the side 0 mm - forwards 10 mm - at the side 0 mm - upwards 10 mm - forwards 10 mm - forwards 10 mm - forwards 10 mm - at the side 6 mm - downwards 10 mm - at the side 6 mm - downwards 10 mm - upwards 10 mm - upwards 10 mm - upwards 10 mm - downwards 10	Installation/ mounting/ dimensions	
fastening method side-by-side mounting Yes fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 height 70 mm width 45 mm depth 121 mm required spacing • • with side-by-side mounting 10 mm - forwards 10 mm - downwards 0 mm - at the side 0 mm - forwards 10 mm - upwards 10 mm - downwards 10 mm - at the side 0 mm - downwards 10 mm - downwards 10 mm - prowards 10 mm - prowards 10 mm - at the side 6 mm - downwards 10 mm </td <td>mounting position</td> <td>+/-180° rotation possible on vertical mounting surface; can be tilted forward and</td>	mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and
fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 height 70 mm width 45 mm depth 121 mm required spacing - • with side-by-side mounting 10 mm - forwards 10 mm - upwards 10 mm - downwards 0 mm - at the side 0 mm - forwards 10 mm - at the side 0 mm - forwards 10 mm - at the side 0 mm - forwards 10 mm - forwards 10 mm - forwards 10 mm - at the side 6 mm - downwards 10 mm - at the side 6 mm - downwards 10 mm - forwards 10 mm - downwards 10 mm - downwards 10 mm - at the side 6 mm		backward by +/- 22.5° on vertical mounting surface
height 70 mm width 45 mm depth 121 mm required spacing - • with side-by-side mounting - - forwards 10 mm - upwards 10 mm - downwards 10 mm - downwards 0 mm - at the side 0 mm - for grounded parts - - forwards 10 mm - at the side 0 mm - forwards 10 mm - at the side 6 mm - downwards 10 mm - for live parts - - forwards 10 mm - downwards 10 mm - at the side 6 mm	fastening method side-by-side mounting	Yes
width 45 mm depth 121 mm required spacing 10 mm - forwards 10 mm - upwards 10 mm - downwards 10 mm - adwnwards 0 mm - at the side 0 mm - for grounded parts 0 mm - forwards 10 mm - at the side 0 mm - at the side 0 mm - at the side 10 mm - at the side 6 mm - downwards 10 mm - at the side 6 mm - downwards 10 mm - at the side 6 mm - downwards 10 mm - forwards 10 mm - at the side 6 mm - upwards 10 mm - at the side 6 mm	fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
depth121 mmrequired spacingI0 mm- forwards10 mm- upwards10 mm- downwards0 mm- at the side0 mm- at the side0 mm- for grounded parts0 mm- forwards10 mm- upwards10 mm- forwards10 mm- forwards10 mm- forwards10 mm- upwards10 mm- at the side6 mm- downwards10 mm- at the side6 mm- downwards10 mm- for live parts10 mm- forwards10 mm- upwards10 mm- horwards10 mm- horwards10 mm- horwards10 mm- upwards10 mm- horwards10 mm	height	70 mm
required spacing• with side-by-side mounting- forwards10 mm- upwards10 mm- downwards0 mm- at the side0 mm• for grounded parts0 mm- forwards10 mm- upwards10 mm- at the side6 mm- upwards10 mm- at the side6 mm- downwards10 mm- at the side6 mm- downwards10 mm- at the side6 mm- downwards10 mm- forwards10 mm- forwards10 mm- forwards10 mm- forwards10 mm- forwards10 mm- the side6 mm- upwards10 mm	width	45 mm
• with side-by-side mounting- forwards10 mm- upwards10 mm- downwards0 mm- at the side0 mm• for grounded parts10 mm- forwards10 mm- upwards10 mm- upwards10 mm- upwards10 mm- at the side6 mm- downwards10 mm- downwards10 mm- at the side6 mm- downwards10 mm- forwards10 mm- forwards10 mm- forwards10 mm- forwards10 mm- forwards10 mm- at the side6 mm	depth	121 mm
- forwards 10 mm - upwards 10 mm - downwards 10 mm - at the side 0 mm • for grounded parts 0 mm - forwards 10 mm - upwards 10 mm - of orwards 10 mm - upwards 10 mm - upwards 10 mm - at the side 6 mm - downwards 10 mm - forwards 10 mm - forwards 10 mm - downwards 10 mm - forwards 10 mm - at the side 6 mm	required spacing	
- upwards 10 mm - downwards 10 mm - at the side 0 mm • for grounded parts - - forwards 10 mm - upwards 10 mm - upwards 10 mm - at the side 6 mm - downwards 10 mm - downwards 10 mm - forwards 10 mm - upwards 10 mm - upwards 10 mm - upwards 10 mm - downwards 10 mm	 with side-by-side mounting 	
- downwards10 mm- at the side0 mm• for grounded parts forwards10 mm- upwards10 mm- at the side6 mm- downwards10 mm- for live parts forwards10 mm- forwards10 mm- forwards10 mm- forwards10 mm- forwards10 mm- forwards10 mm- at the side6 mm- at the side6 mm	— forwards	10 mm
- at the side 0 mm • for grounded parts - - forwards 10 mm - upwards 10 mm - at the side 6 mm - downwards 10 mm - downwards 10 mm - forwards 10 mm - downwards 10 mm - forwards 10 mm - forwards 10 mm - upwards 10 mm - downwards 10 mm	— upwards	10 mm
• for grounded parts- forwards10 mm- upwards10 mm- at the side6 mm- downwards10 mm• for live parts forwards10 mm- upwards10 mm- at the side6 mm- forwards10 mm- at the side6 mm- at the side6 mm- at the side6 mm	— downwards	10 mm
- forwards10 mm- upwards10 mm- at the side6 mm- downwards10 mm• for live parts forwards10 mm- upwards10 mm- downwards10 mm- at the side6 mm	— at the side	0 mm
	• for grounded parts	
- at the side6 mm- downwards10 mm• for live parts forwards10 mm- upwards10 mm- downwards10 mm- at the side6 mm	— forwards	10 mm
- downwards10 mm• for live parts forwards10 mm- upwards10 mm- downwards10 mm- at the side6 mm	— upwards	10 mm
• for live parts — forwards — upwards — downwards — at the side 6 mm	— at the side	6 mm
- forwards 10 mm - upwards 10 mm - downwards 10 mm - at the side 6 mm	— downwards	10 mm
- forwards 10 mm - upwards 10 mm - downwards 10 mm - at the side 6 mm	• for live parts	
upwards 10 mm downwards 10 mm at the side 6 mm		10 mm
- downwards 10 mm - at the side 6 mm	— upwards	10 mm
- at the side 6 mm		10 mm

type of electrical connection	
for main current circuit	spring-loaded terminals
 for auxiliary and control circuit 	spring-loaded terminals
at contactor for auxiliary contacts	Spring-type terminals
of magnet coil	Spring-type terminals
type of connectable conductor cross-sections for main contacts	
• solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
 solid or stranded 	2x (0,5 4 mm ²)
 finely stranded with core end processing 	2x (0.5 2.5 mm ²)
 finely stranded without core end processing 	2x (0.5 2.5 mm ²)
type of connectable conductor cross-sections	
 for auxiliary contacts 	
— solid or stranded	2x (0,5 4 mm²)
— finely stranded with core end processing	2x (0.5 2.5 mm²)
- finely stranded without core end processing	2x (0.5 2.5 mm²)
for AWG cables for auxiliary contacts	2x (20 12)
AWG number as coded connectable conductor cross section	
• for main contacts	20 12
 for auxiliary contacts 	20 12
Safety related data	
product function	
 mirror contact according to IEC 60947-4-1 	Yes
 positively driven operation according to IEC 60947-5-1 	No
suitable for safety function	Yes
suitability for use safety-related switching OFF	Yes
service life maximum	20 a
test wear-related service life necessary	Yes
proportion of dangerous failures	
 with low demand rate according to SN 31920 	40 %
 with high demand rate according to SN 31920 	73 %
B10 value with high demand rate according to SN 31920	1 000 000
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
ISO 13849	
device type according to ISO 13849-1	3
overdimensioning according to ISO 13849-2 necessary	Yes
IEC 61508	
safety device type according to IEC 61508-2	Туре А
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
Communication/ Protocol	
product function bus communication Approvals Certificates	No
General Product Approval	
	Confirmation
	Confirmation KC
	u contraction of the second se
General Product Ap- EMV Test Certificat	tes Marine / Shipping
proval Linv Test Certificat	indine , onipping
	rtific- Special Test Certific-
	port ate
RCM	ABS
	VERITAS
Marine / Shipping	other

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- Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
- https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-2KB42-0LA0

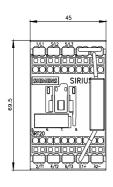
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

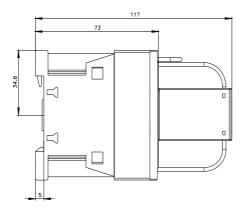
- http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2017-2KB42-0LA0&lang=en
- Characteristic: Tripping characteristics, I²t, Let-through current

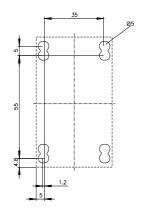
https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-2KB42-0 A0/char

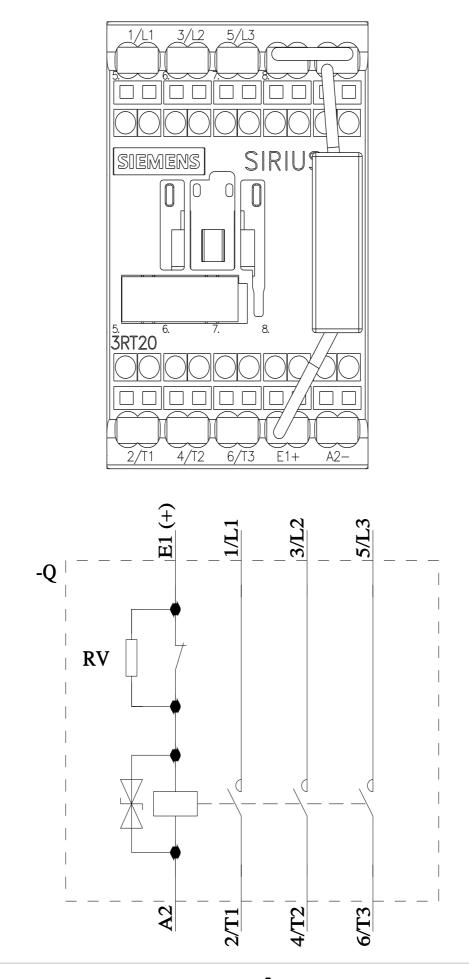
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2017-2KB42-0LA0&objecttype=14&gridview=view1









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