SIEMENS

Data sheet 3RT2017-1AK61



power contactor, AC-3e/AC-3, 12 A, 5.5 kW / 400 V, 3-pole, 110 V AC, 50 Hz / 120 V, 60 Hz, auxiliary contacts: 1 NO, screw terminal

100		
product brand name	SIRIUS	
product designation	Power contactor	
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 	1.5 W	
 at AC in hot operating state per pole 	0.5 W	
 without load current share typical 	5.9 W	
insulation voltage		
 of main circuit with degree of pollution 3 rated value 	690 V	
 of auxiliary circuit with degree of pollution 3 rated value 	690 V	
surge voltage resistance		
 of main circuit rated value 	6 kV	
 of auxiliary circuit rated value 	6 kV	
maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1	400 V	
shock resistance at rectangular impulse		
• at AC	7,3g / 5 ms, 4,7g / 10 ms	
shock resistance with sine pulse		
• at AC	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	
Ambient conditions		
installation altitude at height above sea level maximum	2 000 m	
ambient temperature		
 during operation 	-25 +60 °C	
 during storage 	-55 +80 °C	
relative humidity minimum	10 %	
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %	
Main circuit		

number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	000 1/
at AC-3 rated value maximum	690 V
at AC-3e rated value maximum	690 V
pperational current	22 A
 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	22 A
rated value	
 up to 690 V at ambient temperature 60 °C rated value 	20 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
 at AC-5a up to 690 V rated value 	19.4 A
 at AC-5b up to 400 V rated value 	9.9 A
• at AC-6a	
 up to 230 V for current peak value n=20 rated value 	7.2 A
 up to 400 V for current peak value n=20 rated value 	7.2 A
 up to 500 V for current peak value n=20 rated value 	7.2 A
 up to 690 V for current peak value n=20 rated value 	6.7 A
• at AC-6a	
 up to 230 V for current peak value n=30 rated value 	4.8 A
 up to 400 V for current peak value n=30 rated value 	4.8 A
 up to 500 V for current peak value n=30 rated value 	4.8 A
 up to 690 V for current peak value n=30 rated value 	4.8 A
ninimum cross-section in main circuit at maximum AC-1 ated value	4 mm ²
pperational current for approx. 200000 operating cycles at AC-4	
at 400 V rated value	4.1 A
at 400 V rated value at 690 V rated value	3.3 A
perational current	0.071
• at 1 current path at DC-1	
— at 24 V rated value	20 A
— at 60 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
at 600 v rated value with 2 current paths in series at DC-1	υ.υ Λ
	20 A
— at 24 V rated value	20 A
— at 60 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	20.4
— at 24 V rated value	20 A
— at 60 V rated value	20 A

at 110 V rated value	20 A
— at 110 V rated value	20 A 20 A
— at 220 V rated value	
— at 440 V rated value— at 600 V rated value	1.3 A 1 A
	I A
 at 1 current path at DC-3 at DC-5 — at 24 V rated value 	20 A
— at 60 V rated value	0.5 A
— at 110 V rated value	0.15 A
with 2 current paths in series at DC-3 at DC-5	0.10 A
— at 24 V rated value	20 A
— at 60 V rated value	5 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 60 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-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
operating apparent power at AC-6a	Z.O KVV
• up to 230 V for current peak value n=20 rated value	2.8 kVA
• up to 400 V for current peak value n=20 rated value	4.9 kVA
up to 500 V for current peak value n=20 rated value	6.2 kVA
up to 690 V for current peak value n=20 rated value	8 kVA
operating apparent power at AC-6a	
 up to 230 V for current peak value n=30 rated value 	1.9 kVA
 up to 400 V for current peak value n=30 rated value 	3.3 kVA
 up to 500 V for current peak value n=30 rated value 	4.1 kVA
• up to 690 V for current peak value n=30 rated value	5.7 kVA
short-time withstand current in cold operating state	
up to 40 °C	000 A III
limited to 1 s switching at zero current maximum	200 A; Use minimum cross-section acc. to AC-1 rated value
Iimited to 5 s switching at zero current maximum Iimited to 10 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 limited to 30 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 limited to 60 s switching at zero current maximum 	74 A; Use minimum cross-section acc. to AC-1 rated value 61 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	OTA, OSC Milliminum Gross-Section acc. to AC-1 Tated value
at AC	10 000 1/h
operating frequency	10 000 1/11
at AC-1 maximum	1 000 1/h
• at AC-2 maximum	750 1/h
• at AC-3 maximum	750 1/h
at AC-3e maximum	750 1/h
• at AC-4 maximum	250 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	AO .
at 50 Hz rated value	110 V
at 60 Hz rated value	120 V
- at oo rie ratou faido	

operating range factor control supply voltage rated value of magnet coil at AC		
* at 60 Hz	operating range factor control supply voltage rated	
a till 0-1tz a fill 0-1tz a fil		00.44
apparent pick-up power of magnet coil at AC		
* at 50 Hz		0.8 1.1
• at 60 Hz • at 65 Hz • at 60 Hz • a		2014
inductive power factor with closing power of the coil		
• at 60 Hz apparent holdring power of magnet coil at AC • at 50 Hz apparent holdring power of magnet coil at AC • at 50 Hz • at 60 Hz 5.9 VA • at 60 Hz • at 60 Hz		36 VA
apparent holding power of magnet coil at AC		
• at 50 Hz		0.8
* at 50 Hz		
Inductive power factor with the holding power of the cit		
a 15 0 Hz		5.9 VA
• at 50 H₂ • at 80 H₂ • at 80 H₂ • at 8C • at		
e at 60 Hz closing delay		0.04
closing delay		
e at AC opening delay e at AC arcing time control version of the switch operating mechanism 10 15 ms 10 15 ms 5 control version of the switch operating mechanism 10 15 ms 5 control version of the switch operating mechanism 10 15 ms 5 control version of the switch operational current at AC-12 maximum 10 A operational current at AC-15 e at 230 V rated value 10 A e at 4500 V rated value 2 A e at 500 V rated value 2 A e at 500 V rated value 1 A operational current at DC-12 e at 24 V rated value 6 A e at 600 V rated value 6 A e at 100 V rated value 7 A e at 250 V rated value 9 A e at 1250 V rated value 9 A e at 250 V rated		0.24
e at AC a tal AC a tal AC archg time control version of the switch operating mechanism Auxillary circuit Tumber of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 a tal 230 V rated value at 400 V rated value at 400 V rated value at 480 V rated value b at 480 V rated value at 480 V rated value at 480 V rated value b at 480 V rated value at 22 A at 480 V rated value at 480 V rated		0.05
e at AC		9 35 ms
arcing time control version of the switch operating mechanism Auxiliary circuit number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 650 V rated value • at 68 V rated value • at 48 V rated value • at 48 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value • at 20 V rated value • at 125 V rated value • at 110 V rated value • at 125 V rated value • at 20 V rated value • at 30 V rated value • at 40 V rat		<u> </u>
Standard A1 - A2		
Auxiliary circuit number of NO contacts for auxiliary contacts 1	5	
number of NO contacts for auxiliary contacts 1 Instantaneous contact 1 Insta		Standard A1 - A2
instalnaeous contact operational current at AC-12 maximum operational current at AC-15 at 230 V rated value	Auxiliary circuit	
operational current at AC-12 maximum operational current at AC-15		1
operational current at AC-15 • at 230 V rated value		
	•	10 A
	•	
• at 690 V rated value operational current at DC-12 • at 24 V rated value • at 48 V rated value • at 48 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 3 600 V rated value • at 3 600 V rated value • at 48 V rated value • at 600 V rated value • at 600 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 3600 V rated value • at 480 V rated value • 1 A • at 25 V rated value • 1 A • at 2600 V rated value • 1 A • at 480 V rated value • 1 A contact reliability of auxiliary contacts trill-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • at 480 V rated value • at 220 V rated value • for single-phase AC motor • at 480 V rated value • for 3-phase AC motor • at 220/228 V rated value • for 3-phase AC motor • at 230 V rated value • for 3-phase AC motor • at 480 V rated value • for 3-phase AC motor • at 230/208 V rated value • for 3-phase AC motor • at 480 V rated value • for 3-phase AC motor • at 240/208 V rated value • for 3-phase AC motor • at 250/208 V rated value • for 3-phase AC motor • at 260/208 V rated value • for 3-phase AC motor • at 270/208 V rated value • for 3-phase AC motor • at 480/480 V rated value • for 3-phase AC motor • at 270/208 V rated value • for 3-phase AC motor • at 280/208 V rated value • for 3-phase AC motor • at 280/208 V rated value • for 3-phase AC motor • at 280/208 V rated value • for 3-phase AC motor • for 3-phase AC		
10 A		
	 at 690 V rated value 	1 A
• at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 24 V rated value • at 24 V rated value • at 48 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 • at 125 V rated value • at 220 V rated value • at 3600 V rated value • at 480 V rated value • at 600 V rated value • at 600 V rated value • at 300 V rated value • at 600 V rated value • at 480 V rated value • at 600 V rated value • at 480 V rated value • at 600 V rated value • at 480 V rated value • at 600 V rated value • at 600 V rated value • at 7.5 hp • at 575/600 V rated value • at 460/480 V rated value • at 575/600 V rated value • at 600 V According to UL • According to UL • According to UL • According to UL • According to UL	•	
■ at 10 V rated value ■ at 110 V rated value ■ at 125 V rated value ■ at 220 V rated value ■ at 220 V rated value ■ at 600 V rated value ■ at 600 V rated value ■ at 600 V rated value ■ at 48 V rated value ■ at 110 V rated value ■ at 110 V rated value ■ at 110 V rated value ■ at 120 V rated value ■ at 220 V rated value ■ at 220 V rated value ■ at 200 V rated value ■ at 600 V rated value ■ at 28 V rated value ■ at 800 V rated value ■ at 800 V rated value ■ at 600 V rated value ■ at 200 V rated value □ at 575/600 V rated value □ at 500 V Ated value □ at 575/600 V rated value	 at 24 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 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 125 V rated value at 220 V rated value at 600 V rated value at 480 V rated value at 480 V rated value at 480 V rated value at 600 V rated value at 70 V rated value at 600 V rated value at 70 Sphase AC motor at 200/208 V rated value at 70 Sphase AC motor at 200/208 V rated value at 600 V rated value at 600 V rated value at 75 Sp00 V rated value at 600 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 80 V rated value at 80 V rated value at 10 A at 48 V rated value at 10 V rated value at 125 V rated value at 220 V rated value at 220 V rated value at 600 V rated value at 11 A yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value at 230 V rated value bf or 3-phase AC motor at 230 V rated value at 230 V rated value at 200/208 V rated value at 460/480 V rated value at 575/600 V rated value bhp at 575/600 V rated value at 575/600 V rated value at 575/600 V rated value at 600 / Q600 		
 at 220 V rated value at 600 V rated value 0.15 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 480 V rated value at 480 V rated value at 480 V rated value at 600 V rated value at 7 A at 101/120 V rated value at 110/120 V rated value at 110/120 V rated value at 200/208 V rated value at 460480 V rated value at 460480 V rated value at 575/600 V rated value by at 575/600 V rated value at 575/600 V rated value at 575/600 V rated value by contact rating of auxiliary contacts according to UL A600 / Q600 	 at 110 V rated value 	3 A
• 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 100 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 260 V rated value • at 600 V rated value contact reliability of auxiliary contacts IUL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value 11 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 9 to for 3-phase AC motor — at 230 V rated value 9 to for 3-phase AC motor — at 200/208 V rated value 9 to for 3-phase AC motor 9 to for 3-phase AC motor 9 to for 3-phase AC motor 9 to for	at 125 V rated value	
• at 24 V rated value		
• at 24 V rated value • at 48 V rated value • at 60 V rated value • at 20 V rated value • at 600 V rated value • at 20 V rated value • at 600 V rated value • at 600 V rated value contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value 11 A • at 600 V rated value 11 A vielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 0.5 hp — at 230 V rated value 9 thp • for 3-phase AC motor — at 200/208 V rated value 2 hp • for 3-phase AC motor — at 200/208 V rated value 3 hp — at 200/208 V rated value 3 hp — at 460/480 V rated value 7.5 hp — at 575/600 V rated value 10 hp contact rating of auxiliary contacts according to UL A600 / Q600	 at 600 V rated value 	0.15 A
 at 48 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 220 V rated value at 220 V rated value at 600 V rated value at 480 V rated value at 600 V rated value at 600 V rated value at 70 single-phase AC motor at 10 vated value at 230 V rated value at 230 V rated value at 200/208 V rated value at 200/208 V rated value at 200/208 V rated value at 460/480 V rated value at 575/600 V rated value bp contact rating of auxiliary contacts according to UL 	operational current at DC-13	
 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 480 V rated value at 600 V rated value for single-phase AC motor at 11 A at 600 V rated value at 11 A yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value at 230 V rated value for 3-phase AC motor at 200/208 V rated value at 200/208 V rated value at 200/208 V rated value at 460/480 V rated value at 575/600 V rated value to hp contact rating of auxiliary contacts according to UL 	at 24 V rated value	
 at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 480 V rated value at 600 V rated value at 600 V rated value for single-phase AC motor at 10/120 V rated value at 230 V rated value at 230 V rated value at 230 V rated value at 200/208 V rated value at 200/208 V rated value at 460/480 V rated value at 460/480 V rated value at 575/600 V rated value bp contact rating of auxiliary contacts according to UL 	at 48 V rated value	
 at 125 V rated value at 220 V rated value at 600 V rated value at 480 V rated value at 600 V rated value at 600 V rated value at 600 V rated value at 11 A at 600 V rated value for single-phase AC motor at 110/120 V rated value at 230 V rated value at 230 V rated value at 230 V rated value at 220/230 V rated value at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value at 575/600 V rated value at 600 / Q600 		
 at 220 V rated value at 600 V rated value contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value 11 A at 600 V rated value for single-phase AC motor at 110/120 V rated value at 230 V rated value at 230 V rated value at 200/208 V rated value at 220/230 V rated value at 2460/480 V rated value at 460/480 V rated value at 575/600 V rated value at 575/600 V rated value at 200 V Q600 		
at 600 V rated value contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA) UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value for single-phase AC motor at 110/120 V rated value for 3-phase AC motor at 230 V rated value for 3-phase AC motor at 200/208 V rated value at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value contact rating of auxiliary contacts according to UL at 4600 / Q600		
tull-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor — at 220/230 V rated value • at 220/230 V rated value — at 2575/600 V rated value — at 575/600 V rated value contact rating of auxiliary contacts according to UL 1 faulty switching per 100 million (17 V, 1 mA) 1 h A 1 h A 1 h A 1 of 000 V at 480 V		
UL/CSA ratings full-load current (FLA) for 3-phase AC motor		
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value 11 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value contact rating of auxiliary contacts according to UL 11 A	contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
 at 480 V rated value at 600 V rated value yielded mechanical performance [hp] for single-phase AC motor - at 110/120 V rated value - at 230 V rated value for 3-phase AC motor - at 200/208 V rated value - at 220/230 V rated value - at 460/480 V rated value - at 575/600 V rated value contact rating of auxiliary contacts according to UL 	UL/CSA ratings	
 at 600 V rated value yielded mechanical performance [hp] for single-phase AC motor — at 110/120 V rated value at 230 V rated value for 3-phase AC motor at 200/208 V rated value at 220/230 V rated value at 220/230 V rated value at 460/480 V rated value at 575/600 V rated value to hp contact rating of auxiliary contacts according to UL 	full-load current (FLA) for 3-phase AC motor	
yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value 2 hp • for 3-phase AC motor — at 200/208 V rated value 3 hp — at 220/230 V rated value 3 hp — at 460/480 V rated value 7.5 hp — at 575/600 V rated value 10 hp contact rating of auxiliary contacts according to UL A600 / Q600	 at 480 V rated value 	11 A
 for single-phase AC motor — at 110/120 V rated value 0.5 hp — at 230 V rated value 2 hp for 3-phase AC motor — at 200/208 V rated value 3 hp — at 220/230 V rated value 3 hp — at 460/480 V rated value 7.5 hp — at 575/600 V rated value 10 hp contact rating of auxiliary contacts according to UL A600 / Q600 	 at 600 V rated value 	11 A
 — at 110/120 V rated value — at 230 V rated value ● for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value To hp Contact rating of auxiliary contacts according to UL 	yielded mechanical performance [hp]	
 — at 230 V rated value ● for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value 10 hp contact rating of auxiliary contacts according to UL 	 for single-phase AC motor 	
● for 3-phase AC motor — at 200/208 V rated value 3 hp — at 220/230 V rated value 3 hp — at 460/480 V rated value 7.5 hp — at 575/600 V rated value 10 hp contact rating of auxiliary contacts according to UL A600 / Q600	 at 110/120 V rated value 	0.5 hp
- at 200/208 V rated value 3 hp - at 220/230 V rated value 3 hp - at 460/480 V rated value 7.5 hp - at 575/600 V rated value 10 hp contact rating of auxiliary contacts according to UL A600 / Q600	— at 230 V rated value	2 hp
— at 220/230 V rated value 3 hp — at 460/480 V rated value 7.5 hp — at 575/600 V rated value 10 hp contact rating of auxiliary contacts according to UL A600 / Q600	 for 3-phase AC motor 	
- at 220/230 V rated value 3 hp - at 460/480 V rated value 7.5 hp - at 575/600 V rated value 10 hp contact rating of auxiliary contacts according to UL A600 / Q600	 at 200/208 V rated value 	3 hp
— at 460/480 V rated value 7.5 hp — at 575/600 V rated value 10 hp contact rating of auxiliary contacts according to UL A600 / Q600	 at 220/230 V rated value 	·
— at 575/600 V rated value 10 hp contact rating of auxiliary contacts according to UL A600 / Q600	 at 460/480 V rated value 	
contact rating of auxiliary contacts according to UL A600 / Q600	 at 575/600 V rated value 	
	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
 - with type of assignment 2 required

 for short-circuit protection of the auxiliary switch required gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA) gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)

gG: 10 A (500 V, 1 kA)

1 4 11 41 4		
Installation/	mounting	dimensions
III Stallation	mounting	difficition

mounting position fastening method

• side-by-side mounting

height width depth

required spacing

• with side-by-side mounting

forwardsupwardsdownwardsat the side

for grounded parts

forwardsupwardsat the sidedownwards

for live partsforwardsupwards

downwardsat the side

+/-180° 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 DIN rail according to DIN EN 60715

Yes 58 mm 45 mm 73 mm

10 mm 10 mm

> 10 mm 0 mm

10 mm 10 mm 6 mm 10 mm 10 mm

10 mm

Connections/ Terminals

type of electrical connection

• for main current circuit

for auxiliary and control circuitat contactor for auxiliary contacts

of magnet coil

type of connectable conductor cross-sections for main contacts

solidsolid or stranded

finely stranded with core end processing

connectable conductor cross-section for main contacts

solidstranded

finely stranded with core end processing

connectable conductor cross-section for auxiliary contacts

solid or strandedfinely stranded with core end processing

type of connectable conductor cross-sections

for auxiliary contacts

— solid or stranded— finely stranded with core end processing

• at AWG cables for auxiliary contacts

AWG number as coded connectable conductor cross section

for main contactsfor auxiliary contacts

screw-type terminals

screw-type terminals Screw-type terminals Screw-type terminals

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm² 2x (0,5 ... 1,5 mm²), 2x (0,75 ... 2,5 mm²), 2x 4 mm²

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)

0.5 ... 4 mm²

0.5 ... 4 mm²

0.5 ... 2.5 mm²

0.5 ... 4 mm²

0.5 ... 2.5 mm²

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), 2x 4 mm²

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²) 2x (20 ... 16), 2x (18 ... 14), 2x 12

20 ... 12 20 ... 12

Safety related data

product function

• mirror contact according to IEC 60947-4-1 B10 value with high demand rate according to SN 31920 Yes; with 3RH29 1 000 000

proportion of dangerous failures

• with low demand rate according to SN 31920

• with high demand rate according to SN 31920

failure rate [FIT] with low demand rate according to SN 31920

T1 value for proof test interval or service life according to IEC 61508

protection class IP on the front according to IEC 60529

touch protection on the front according to IEC 60529 suitability for use

• safety-related switching OFF

40 %

73 %

100 FIT

20 a

IP20

finger-safe, for vertical contact from the front

Yes

Certificates/ approvals

General Product Approval





Confirmation



<u>KC</u>



EMC

Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates



Type Examination Certificate





Type Test Certificates/Test Report

Special Test Certificate

Marine / Shipping





Confirmation









Marine / Shipping

other

 \wedge

Confirmation

Vibration and Shock

Railway

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)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2017-1AK61

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2017-1AK61

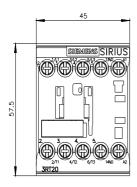
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

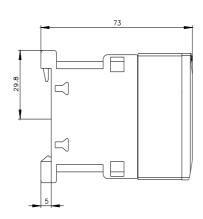
https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-1AK6

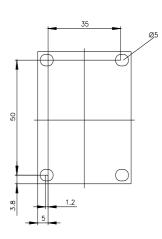
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

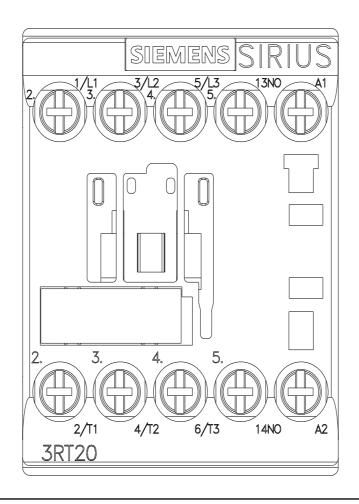
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2017-1AK61\&lang=en}$

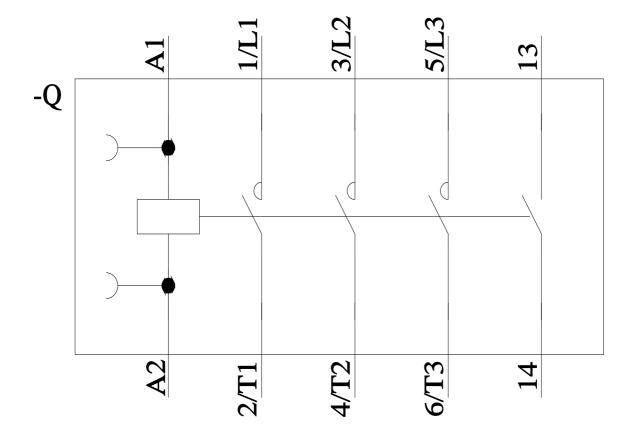
Characteristic: Tripping characteristics, I2t, Let-through current











last modified: 2/10/2023 🖸