SIEMENS

Data sheet 3RT2037-1KB40



Power contactor, AC-3 65 A, 30 kW / 400 V 1 NO + 1 NC, 24 V DC with varistor 3-pole, Size S2 Screw terminal Suitable for 2 A PLC outputs

product brand name	SIRIUS
product designation	Coupling 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 	11.4 W
 at AC in hot operating state per pole 	3.8 W
 without load current share typical 	1 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 DC	7.7g / 5 ms, 4.5g / 10 ms
shock resistance with sine pulse	
• at DC	12g / 5 ms, 7g / 10 ms
mechanical service life (switching cycles)	
 of contactor typical 	10 000 000
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000
of the contactor with added auxiliary switch block typical	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2014
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
 during operation 	-25 +60 °C
during storage	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %

number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
at AC-3 rated value maximum	690 V
at AC-3e rated value maximum	690 V
operational current	
at AC-1 at 400 V at ambient temperature 40 °C	80 A
rated value	007.
• at AC-1	
— up to 690 V at ambient temperature 40 °C	80 A
rated value	
— up to 690 V at ambient temperature 60 °C	70 A
rated value	
• at AC-3	
— at 400 V rated value	65 A
— at 500 V rated value	65 A
— at 690 V rated value	47 A
• at AC-3e	
— at 400 V rated value	65 A
— at 500 V rated value	65 A
— at 690 V rated value	47 A
 at AC-4 at 400 V rated value 	55 A
 at AC-5a up to 690 V rated value 	70.4 A
 at AC-5b up to 400 V rated value 	53.9 A
• at AC-6a	
— up to 230 V for current peak value n=20 rated	56.9 A
value	
— up to 400 V for current peak value n=20 rated	56.9 A
value	
 up to 500 V for current peak value n=20 rated 	56.9 A
value	
 up to 690 V for current peak value n=20 rated value 	47 A
• at AC-6a	
	38 A
 up to 230 V for current peak value n=30 rated value 	36 A
— up to 400 V for current peak value n=30 rated	38 A
value	337.
— up to 500 V for current peak value n=30 rated	38 A
value	
 up to 690 V for current peak value n=30 rated 	38 A
value	
minimum cross-section in main circuit at maximum AC-1	25 mm²
rated value	
operational current for approx. 200000 operating cycles at AC-4	
at 400 V rated value	28 A
at 690 V rated value at 690 V rated value	22 A
operational current	22 IX
at 1 current path at DC-1	
- at 24 V rated value	55 A
— at 24 V rated value — at 110 V rated value	4.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.4 A
— at 600 V rated value	0.25 A
with 2 current paths in series at DC-1	
— at 24 V rated value	55 A
— at 110 V rated value	45 A
— at 220 V rated value	5 A
— at 440 V rated value	1 A
— at 600 V rated value	0.8 A
 with 3 current paths in series at DC-1 	

— at 24 V rated value	55 A
— at 110 V rated value	55 A
— at 220 V rated value	45 A
— at 440 V rated value	2.9 A
— at 600 V rated value	1.4 A
 at 1 current path at DC-3 at DC-5 	
— at 24 V rated value	35 A
— at 110 V rated value	2.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.1 A
— at 600 V rated value	0.06 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	55 A
— at 110 V rated value	25 A
— at 220 V rated value	5 A
— at 440 V rated value	0.27 A
— at 600 V rated value	0.16 A
 with 3 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	55 A
— at 110 V rated value	55 A
— at 220 V rated value	25 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.35 A
operating power	0.0071
at AC-2 at 400 V rated value	30 kW
• at AC-3	OU IVV
— at 230 V rated value	18.5 kW
— at 400 V rated value	30 kW
— at 500 V rated value	37 kW
— at 690 V rated value	37 kW
• at AC-3e	40 E IAM
— at 230 V rated value	18.5 kW
— at 400 V rated value	30 kW
— at 500 V rated value	37 kW
— at 690 V rated value operating power for approx. 200000 operating cycles	37 kW
at AC-4	44.7 120
at 400 V rated value	14.7 kW
at 690 V rated value	20 kW
operating apparent power at AC-6a	00.011/4
• up to 230 V for current peak value n=20 rated value	22.6 kVA
• up to 400 V for current peak value n=20 rated value	39.4 kVA
• up to 500 V for current peak value n=20 rated value	49.2 kVA
up to 690 V for current peak value n=20 rated value	56.1 kVA
operating apparent power at AC-6a	
• up to 230 V for current peak value n=30 rated value	15.1 kVA
• up to 400 V for current peak value n=30 rated value	26.2 kVA
 up to 500 V for current peak value n=30 rated value 	32.8 kVA
up to 690 V for current peak value n=30 rated value	45.3 kVA
short-time withstand current in cold operating state	
up to 40 °C	1.055 A: Use minimum cross section acc. to AC 1 reted value
limited to 1 s switching at zero current maximum limited to 5 s switching at zero current maximum	1 055 A; Use minimum cross-section acc. to AC-1 rated value 730 A; Use minimum cross-section acc. to AC-1 rated value
limited to 5 s switching at zero current maximum limited to 10 s switching at zero current maximum	
limited to 10 s switching at zero current maximum limited to 20 s switching at zero current maximum	520 A; Use minimum cross-section acc. to AC-1 rated value
Ilmited to 30 s switching at zero current maximum Ilmited to 60 s switching at zero current maximum	336 A; Use minimum cross-section acc. to AC-1 rated value
Iimited to 60 s switching at zero current maximum	272 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	4.500.4%
• at DC	1 500 1/h
operating frequency	000 4 //
• at AC-1 maximum	800 1/h
at AC-2 maximum	400 1/h

	-t AO 2ir	700 4/1-
A AC-4 maximum 200 1/h	• at AC-3 maximum	700 1/h
Control circuité Control Upos d'voltage at DC • rated value • r		
Type of voltage of the control supply voltage		200 1/h
control supply voltage at DC	Control circuit/ Control	
• rated value of magnet cot control supply voltage rated value of magnet cot at DC • initial vale • full-scale value • full-sca		DC
Operation Angel Sector control supply voltage rated value of magnet coil at DC 1.2	control supply voltage at DC	
value of magnet coll at DC • Initial value 0.8 • Initial value 1.2 • Gelly scale value 1.2 Inrush current peak 2.6 A duration of Inrush current peak 5.9 µs locked-rotor current man value 0.9 A locked-rotor current peak 2.1 A duration of locked-rotor current 230 ms holding power of magnet coll at DC 21.5 W closing power of magnet coll at DC 1 W closing delay • at DC • at DC 35 80 ms opening delay • at DC • at DC 35 80 ms control version of the switch operating mechanism Standard A1 - A2 Auxiliary circuit 1 20 ms number of NC contacts for suciliary contacts instantaneous contact 1 20 ms number of NC contacts for suciliary contacts instantaneous contact 1 20 ms number of NC contacts for suciliary contacts instantaneous contact 1 20 ms number of NC contacts for suciliary contacts 1 20 ms standard value 1 20 ms • at 230 V rated value 1	rated value	24 V
efull-scale value	_	
design of the surge suppressor inrush current peak	initial value	0.8
Inrush current peak	full-scale value	1.2
Dicked-rotor current peak 50 µs Iocked-rotor current mean value 0.9 A Locked-rotor current peak 2.1 A duration of locked-rotor current 230 ms holding current mean value 40 mA closing power of magnet coil at DC 1 W closing power of magnet coil at DC 1 W closing delay • at DC 35 80 ms opening delay • at DC 30 55 ms aring time 10 20 ms control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact 1 instantane	design of the surge suppressor	with varistor
Iocked-rotor current peak	inrush current peak	2.6 A
Incident	duration of inrush current peak	50 µs
duration of locked-rotor current 230 ms holding current mean value 40 mA closing power of magnet coil at DC 1 W closing delay	locked-rotor current mean value	0.9 A
holding current mean value	locked-rotor current peak	2.1 A
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 instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts 1 instantaneous contact number of NC contact for auxiliary contacts 1 instantaneous contact 1 number of NC contact for auxiliary contacts 1 instantaneous contact 1 number of NC contact for auxiliary contacts 1 instantaneous contact 1 number of NC contact for auxiliary contacts 1 instantaneous contact 1 number of NC contact for auxiliary contacts 1 instantaneous contact 1 number of NC contact for auxiliary contacts 1 instantaneous contact 1 number of NC contact for auxiliary contacts 1 instantaneous contact 1 number of NC contact for auxiliary contacts 1 instantaneous contact 1 instantaneou	duration of locked-rotor current	230 ms
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 instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts instantaneous contact number of NC contacts for auxiliary contacts 1 instantaneous contact number of NC contact for auxiliary contacts 1 instantaneous contact 1 number of NC contact for auxiliary contacts 1 instantaneous contact 1 number of NC contact for auxiliary contacts 1 instantaneous contact 1 number of NC contact for auxiliary contacts 1 instantaneous contact 1 number of NC contact for auxiliary contacts 1 instantaneous contact 1 number of NC contact for auxiliary contacts 1 instantaneous contact 1 number of NC contact for auxiliary contacts 1 instantaneous contact 1 number of NC contact for auxiliary contacts 1 instantaneous contact 1 instantaneou	holding current mean value	40 mA
holding power of magnet coll at DC closing delay	closing power of magnet coil at DC	21.5 W
closing delay		1 W
• at DC opening delay • at DC arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value • at 48 V rated value • at 48 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 120 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 220 V rated value • at 24 V rated value • at 25 V rated value • at 27 V rated value • at 28 V rated value • at 29 V rated value • at 20 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 125 V rated value • at 120 V rated value • at 200 V rated value • at 480 V rated value • at 600 V rated value • a		
* at DC arcing time 10 20 ms Control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 * at 230 V rated value * at 400 V rated value * at 690 V rated value * at 690 V rated value * at 48 V rated value * at 48 V rated value * at 48 V rated value * at 110 V rated value * at 125 V rated value * at 127 V rated value * at 128 V rated value * at 128 V rated value * at 129 V rated value * at 129 V rated value * at 120 V rated value * at 125 V rated value * at 127 V rated value * at 128 V rated value * at 148 V rated value * at 128 V rated value * at 128 V rated value * at 128 V rated value * at 129 V rated value * at 129 V rated value * at 120 V rated v		35 80 ms
* at DC arcing time 10 20 ms Control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 * at 230 V rated value * at 400 V rated value * at 690 V rated value * at 690 V rated value * at 48 V rated value * at 48 V rated value * at 48 V rated value * at 110 V rated value * at 125 V rated value * at 127 V rated value * at 128 V rated value * at 128 V rated value * at 129 V rated value * at 129 V rated value * at 120 V rated value * at 125 V rated value * at 127 V rated value * at 128 V rated value * at 148 V rated value * at 128 V rated value * at 128 V rated value * at 128 V rated value * at 129 V rated value * at 129 V rated value * at 120 V rated v	opening delay	
Control version of the switch operating mechanism Standard A1 - A2		30 55 ms
Control version of the switch operating mechanism Standard A1 - A2		
Auxillary circuit number of NC contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 690 V rated value • at 690 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 3A • at 250 V rated value • at 690 V rated value • at 48 V rated value • at 60 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 24 V rated value • at 600 V rated value • at 100 V rated value • at 100 V rated value • at 600 V rated value • at 100 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 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 480 V rated value • at 600 V rated value • at 480 V rated value • at		Standard A1 - A2
number of NC contacts for auxiliary contacts instantaneous contact 1 1 1 1 1 1 1 1 1		
instantaneous contact number of NO contacts for auxiliary contacts instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value • at 480 V rated value • at 480 V rated value • at 48 V rated value • at 48 V rated value • at 40 V rated value • at 40 V rated value • at 40 V rated value • at 40 V rated value • at 40 V rated value • at 40 V rated value • at 60 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 • 52 A yielded mechanical performance [hp]		1
instantaneous contact operational current at AC-12 maximum operational current at AC-15 • at 230 V rated value • at 400 V rated value • at 690 V rated value • at 690 V rated value • at 48 V rated value • at 48 V rated value • at 10 V rated value • at 48 V rated value • at 10 V rated value • at 10 V rated value • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 10 V rated value • at 10 V rated value • at 10 V rated value • at 20 V rated value • at 20 V rated value • at 20 V rated value • at 600 V rated value • at 600 V rated value • at 20 V rated value • at 600 V rated value • at 20 V rated value • at 48 V rated value • at 48 V rated value • at 40 V rated value • at 60 V rated value • at 60 V rated value • at 60 V rated value • at 10 V rated value • at 20 V rated value • at 300 V rated value • at 480 V rated value	instantaneous contact	4
operational current at AC-15		1
 at 230 V rated value at 400 V rated value at 500 V rated value at 690 V rated value 1 A 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 110 V rated value at 125 V rated value at 220 V rated value at 200 V rated value at 200 V rated value at 24 V rated value at 20 V rated value at 30 V rated value at 10 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 480 V rated value at 600 V rated value 	operational current at AC-12 maximum	10 A
 at 400 V rated value at 500 V rated value at 690 V rated value 1 A operational current at DC-12 at 24 V rated value at 48 V rated value at 6 A at 100 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 24 V rated value at 3 A at 24 V rated value at 3 A at 24 V rated value at 3 A at 24 V rated value at 10 A at 3 A at 25 V rated value at 10 A at 10 at 20 V rated value at 10 A at	operational current at AC-15	
at 500 V rated value at 690 V rated value 1 A operational current at DC-12 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 125 V rated value at 600 V rated value at 125 V rated value at 220 V rated value at 220 V rated value at 24 V rated value at 25 V rated value at 25 V rated value at 26 V rated value at 27 V rated value at 28 V rated value at 29 V rated value at 100 V rated value at 100 V rated value at 110 V rated value at 220 V rated value at 220 V rated value at 220 V rated value at 200 V rated value at 200 V rated value at 200 V rated value at 480 V rated value	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 220 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 80 V rated value • at 80 V rated value • at 100 V rated value • at 220 V rated value • at 24 V rated value • at 48 V rated value • at 10 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value • at 120 V rated value • at 120 V rated value • at 220 V rated value • at 30 V rated value • at 480 V rated value • at 480 V rated value • 52 A yielded mechanical performance [hp]	at 400 V rated value	3 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 220 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 80 V rated value • at 80 V rated value • at 100 V rated value • at 220 V rated value • at 24 V rated value • at 48 V rated value • at 10 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value • at 120 V rated value • at 120 V rated value • at 220 V rated value • at 30 V rated value • at 480 V rated value • at 480 V rated value • 52 A yielded mechanical performance [hp]		2 A
Operational current at DC-12		
 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value at 600 V rated value ont 5A Operational current at DC-13 at 24 V rated value at 48 V rated value at 60 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 125 V rated value at 220 V rated value at 220 V rated value at 220 V rated value at 200 V rated value at 3 A at 600 V rated value 52 A 		
 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 ot 600 V rated value ot 600 V rated value at 24 V rated value at 24 V rated value at 24 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 full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value 	·	10 A
 at 60 V rated value at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value operational current at DC-13 at 24 V rated value at 80 V rated value at 60 V rated value at 24 V rated value at 60 V rated value at 60 V rated value at 110 V rated value at 125 V rated value at 125 V rated value at 220 V rated value at 600 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 24 V rated value • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 600 V rated value		
 at 125 V rated value at 220 V rated value 1 A 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 60 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 600 V rated value at 480 V rated value at 480 V rated value at 480 V rated value at 600 V rated value 52 A yielded mechanical performance [hp]		
 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 110 V rated value at 125 V rated value at 220 V rated value at 220 V rated value at 600 V rated value 1 A at 600 V rated value 1 A at 600 V rated value 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 		
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 125 V rated value at 220 V rated value at 600 V rated value built-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value at 600 V rated value full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value 52 A yielded mechanical performance [hp]		
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 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		
 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 700 V rated value at 700 V rated value at 700 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 600 V rated value at 600 V rated value o.1 A 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 at 600 V rated value at 600 V rated value yielded mechanical performance [hp] 	Operational Cuttern & 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 o.1 A 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 yielded mechanical performance [hp] 		10 A
 at 110 V rated value at 125 V rated value at 220 V rated value at 600 V rated value 1 A 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 at 600 V rated value 52 A yielded mechanical performance [hp] 	at 24 V rated value	
 at 125 V rated value 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 at 600 V rated value 52 A yielded mechanical performance [hp] 	at 24 V rated valueat 48 V rated value	2 A
 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 at 600 V rated value 52 A yielded mechanical performance [hp] 	at 24 V rated valueat 48 V rated valueat 60 V rated value	2 A 2 A
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 at 600 V rated value yielded mechanical performance [hp]	 at 24 V rated value at 48 V rated value at 60 V rated value at 110 V rated value 	2 A 2 A 1 A
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 yielded mechanical performance [hp]	 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 	2 A 2 A 1 A 0.9 A
UL/CSA ratings full-load current (FLA) for 3-phase AC motor	 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 	2 A 2 A 1 A 0.9 A 0.3 A
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value 52 A yielded mechanical performance [hp]	 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 	2 A 2 A 1 A 0.9 A 0.3 A 0.1 A
◆ at 480 V rated value ◆ at 600 V rated value 52 A yielded mechanical performance [hp]	 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	2 A 2 A 1 A 0.9 A 0.3 A 0.1 A
• at 600 V rated value 52 A yielded mechanical performance [hp]	 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	2 A 2 A 1 A 0.9 A 0.3 A 0.1 A
yielded mechanical performance [hp]	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	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)
	 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 	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)
tor single-phase AC motor	 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 	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)
	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 yielded mechanical performance [hp]	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)

 — at 110/120 V rated value 	5 hp
— at 230 V rated value	10 hp
 for 3-phase AC motor 	
— at 200/208 V rated value	20 hp
— at 220/230 V rated value	20 hp
 — at 460/480 V rated value 	50 hp
— at 575/600 V rated value	50 hp
contact rating of auxiliary contacts according to UL	A600 / P600
Short-circuit protection	
design of the fuse link	
 for short-circuit protection of the main circuit 	
— with type of coordination 1 required	gG: 250 A (690 V, 100 kA), aM: 160 A (690 V, 100 kA), BS88: 200 A (415 V, 80 kA)
— with type of assignment 2 required	gG: 125A (690V,100kA), aM: 63A (690V,100kA), BS88: 100A (415V,80kA)
 for short-circuit protection of the auxiliary switch required 	gG: 10 A (500 V, 1 kA)
Installation/ mounting/ dimensions	
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted
fastening method	forward and backward by +/- 22.5° on vertical mounting surface screw and snap-on mounting onto 35 mm standard mounting rail
-	according to DIN EN 60715
• side-by-side mounting	Yes 114 mm
height	114 mm
width	55 mm
depth	130 mm
required spacing	
with side-by-side mounting	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
for grounded parts	
— forwards	10 mm
— upwards	10 mm
— at the side	6 mm
— downwards	10 mm
for live parts	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	6 mm
Connections/ Terminals	
type of electrical connection	
for main current circuit	screw-type terminals
for auxiliary and control circuit	screw-type terminals
at contactor for auxiliary contacts	Screw-type terminals
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)
finely stranded with core end processing	2x (1 25 mm²), 1x (1 35 mm²)
at AWG cables for main contacts	2x (18 2), 1x (18 1)
connectable conductor cross-section for main contacts	
finely stranded with core end processing	1 35 mm²
connectable conductor cross-section for auxiliary	1 00 IIIII
contacts	0.5 0.5
solid or stranded	0.5 2.5 mm²
finely stranded with core end processing	0.5 2.5 mm ²
type of connectable conductor cross-sections	

for auxiliary contacts
 — solid or stranded
 — finely stranded with core end processing
 at AWG cables for auxiliary contacts
 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)
 2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)
 2x (20 ... 16), 2x (18 ... 14)

AWG number as coded connectable conductor cross section

for main contactsfor auxiliary contacts18 ... 120 ... 14

for auxiliary contacts	20 14
Safety related data	
product function	
 mirror contact according to IEC 60947-4-1 	Yes
 positively driven operation according to IEC 60947- 5-1 	No
B10 value with high demand rate according to SN 31920	1 000 000
proportion of dangerous failures	
 with low demand rate according to SN 31920 	40 %
with high demand rate according to SN 31920	73 %
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
T1 value for proof test interval or service life according to IEC 61508	20 y
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
suitability for use	
 safety-related switching OFF 	Yes

Certificates/ approvals

General Product Approval



Confirmation





<u>KC</u>



Functional
Safety/Safety of Declaration of Conformity
Machinery

Test Certificates



Type Examination Certificate



Special Test Certificate

Type Test Certificates/Test Report

Marine / Shipping













Marine / Shipping other Railway



Confirmation

Vibration and Shock

Further informatior

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=3RT2037-1KB40

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2037-1KB40

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2037-1KB40

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax de.aspx?mlfb=3RT2037-1KB40&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT2037-1KB40/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2037-1KB40&objecttype=14&gridview=view1

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