3RT1054-6NP38-0PA5

Data sheet



power contactor, AC-3e/AC-3 115 A, 55 kW / 400 V, AC (50-60 Hz) / DC Uc: 200-277 V PLC input 24 V DC 3-pole, auxiliary contacts 2 NO + 2 NC solid-state compatible drive: electronic main circuit: busbar control and auxiliary circuit: screw terminal

product brand name	SIRIUS	
product designation	Power contactor	
product type designation	3RT1	
General technical data		
size of contactor	S6	
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	21 W	
• at AC in hot operating state per pole	7 W	
 without load current share typical 	2.8 W	
insulation voltage		
 of main circuit with degree of pollution 3 rated value 	1 000 V	
• of auxiliary circuit with degree of pollution 3 rated value	500 V	
surge voltage resistance		
of main circuit rated value	8 kV	
 of auxiliary circuit rated value 	6 kV	
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	690 V	
shock resistance at rectangular impulse		
• at AC	8,5g / 5 ms, 4,2g / 10 ms	
• at DC	8,5g / 5 ms, 4,2g / 10 ms	
shock resistance with sine pulse		
• at AC	13,4g / 5 ms, 6,5g / 10 ms	
• at DC	13,4g / 5 ms, 6,5g / 10 ms	
mechanical service life (operating cycles)		
 of contactor typical 	10 000 000	
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000	
of the contactor with added auxiliary switch block typical	10 000 000	
reference code according to IEC 81346-2	Q	
Substance Prohibitance (Date)	05/01/2012	
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 %	

ain circuit		
number of poles for main current circuit	3	
number of NO contacts for main contacts	3	
operating voltage		
 at AC-3 rated value maximum 	1 000 V	
at AC-3e rated value maximum	1 000 V	
operational current		
 at AC-1 at 400 V at ambient temperature 40 °C rated value 	160 A	
• at AC-1		
— up to 690 V at ambient temperature 40 $^{\circ}\text{C}$ rated value	160 A	
— up to 690 V at ambient temperature 60 $^{\circ}\text{C}$ rated value	140 A	
— up to 1000 V at ambient temperature 40 $^{\circ}\text{C}$ rated value	80 A	
— up to 1000 V at ambient temperature 60 $^{\circ}\text{C}$ rated value	80 A	
• at AC-3		
— at 400 V rated value	115 A	
— at 500 V rated value	115 A	
— at 690 V rated value	115 A	
— at 1000 V rated value	53 A	
• at AC-3e		
— at 400 V rated value	115 A	
— at 500 V rated value	115 A	
— at 690 V rated value	115 A	
— at 1000 V rated value	53 A	
• at AC-4 at 400 V rated value	97 A	
• at AC-5a up to 690 V rated value	140 A	
• at AC-5b up to 400 V rated value	95 A	
• at AC-6a		
— up to 230 V for current peak value n=20 rated value	115 A	
— up to 400 V for current peak value n=20 rated value	115 A	
— up to 500 V for current peak value n=20 rated value	115 A	
— up to 690 V for current peak value n=20 rated value	115 A	
— up to 1000 V for current peak value n=20 rated	53 A	
value		
• at AC-6a		
— up to 230 V for current peak value n=30 rated value	98 A	
— up to 400 V for current peak value n=30 rated value	98 A	
— up to 500 V for current peak value n=30 rated value	98 A	
— up to 690 V for current peak value n=30 rated value	98 A	
up to 1000 V for current peak value n=30 rated value	53 A	
minimum cross-section in main circuit at maximum AC-1 rated value	70 mm²	
operational current for approx. 200000 operating cycles at AC-4		
• at 400 V rated value	54 A	
at 690 V rated value	48 A	
operational current		
at 1 current path at DC-1		
— at 24 V rated value	160 A	
— at 60 V rated value	160 A	
— at 110 V rated value	18 A	
— at 220 V rated value	3.4 A	
— at 440 V rated value	0.8 A	
— at 600 V rated value	0.5 A	
• with 2 current paths in series at DC-1		
— at 24 V rated value	160 A	
— at 60 V rated value	160 A	

1000.77	00.4		
— at 220 V rated value	20 A		
— at 440 V rated value	3.2 A		
— at 600 V rated value	1.6 A		
with 3 current paths in series at DC-1			
— at 24 V rated value	160 A		
— at 60 V rated value	160 A		
— at 110 V rated value	160 A		
— at 220 V rated value	160 A		
— at 440 V rated value	11.5 A		
— at 600 V rated value	4 A		
 at 1 current path at DC-3 at DC-5 			
— at 24 V rated value	160 A		
— at 60 V rated value	7.5 A		
— at 220 V rated value	0.6 A		
— at 440 V rated value	0.17 A		
— at 600 V rated value	0.12 A		
 with 2 current paths in series at DC-3 at DC-5 			
— at 24 V rated value	160 A		
— at 60 V rated value	160 A		
— at 110 V rated value	160 A		
— at 220 V rated value	2.5 A		
— at 440 V rated value	0.65 A		
— at 600 V rated value	0.37 A		
 with 3 current paths in series at DC-3 at DC-5 			
— at 24 V rated value	160 A		
— at 60 V rated value	160 A		
— at 110 V rated value	160 A		
— at 220 V rated value	160 A		
— at 440 V rated value	1.4 A		
— at 600 V rated value	0.75 A		
operating power			
• at AC-3			
— at 230 V rated value	37 kW		
— at 400 V rated value	55 kW		
— at 500 V rated value	75 kW		
— at 690 V rated value	110 kW		
— at 1000 V rated value	75 kW		
• at AC-3e			
— at 230 V rated value	37 kW		
— at 400 V rated value	55 kW		
— at 500 V rated value	75 kW		
— at 690 V rated value	110 kW		
— at 1000 V rated value	75 kW		
operating power for approx. 200000 operating cycles at AC-			
4			
• at 400 V rated value	29 kW		
at 690 V rated value	48 kW		
operating apparent power at AC-6a			
 up to 230 V for current peak value n=20 rated value 	40 000 kVA		
 up to 400 V for current peak value n=20 rated value 	80 000 VA		
 up to 500 V for current peak value n=20 rated value 	100 000 VA		
 up to 690 V for current peak value n=20 rated value 	130 000 VA		
• up to 1000 V for current peak value n=20 rated value	90 000 VA		
operating apparent power at AC-6a			
• up to 230 V for current peak value n=30 rated value	30 000 VA		
• up to 400 V for current peak value n=30 rated value	60 000 VA		
• up to 500 V for current peak value n=30 rated value	80 000 VA		
• up to 690 V for current peak value n=30 rated value	110 000 VA		
• up to 1000 V for current peak value n=30 rated value	90 000 VA		
short-time withstand current in cold operating state up to			
40 °C			

minided to 5 is workfiring at zero current maximum minided to 10 is workfiring at zero current maximum minided to 10 is workfiring at zero current maximum minided to 10 is workfiring at zero current maximum minided to 10 is workfiring at zero current maximum minided to 10 is workfiring at zero current maximum mo-load workfiring frequency minided to 10 is workfiring at zero current maximum mo-load workfiring frequency minided to 10 is workfiring frequency minided to 10 is workfiring frequency minided to 10 is minimed to 1			
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Himide to 80 a switching at zero current maximum 572 A; Use minimum cross-section acc, to AC-1 rated value 572 A; Use mi	 limited to 5 s switching at zero current maximum 	1 654 A; Use minimum cross-section acc. to AC-1 rated value	
** imitined to 00 a switching at zero current maximum 572 A. Use minimum cross-section acc. to AC-1 rated value no-load switching frequency 1 000 1/h 1000	 limited to 10 s switching at zero current maximum 	1 170 A; Use minimum cross-section acc. to AC-1 rated value	
no-load switching frequency * at AC * at DC operating frequency * at AC-2 maximum * at AC-2 maximum * at AC-2 maximum * at AC-3 maximum * at AC-4 maximum * at BO Hz * at	 limited to 30 s switching at zero current maximum 		
+ al DC	 limited to 60 s switching at zero current maximum 		
## ACC operating requency ## ACC-2 maximum ## ACC-2 maximum ## ACC-2 maximum ## ACC-3 maximum ##	no-load switching frequency		
operating frequency * all AC-I maximum * all AC-3 maximum * all AC-3 maximum * all AC-3 maximum * all AC-4 maximum * all OHz rated value * all OHz * initial value * all OHz	• at AC	1 000 1/h	
	• at DC	1 000 1/h	
A AC-I maximum	operating frequency		
■ al AC-3 maximum ■ al AC-4 maximum ■ 1000 l/h ■ al AC-4 maximum ■ al BO-142 ■ al BO-143 ■ al BO-144		800 1/h	
	• at AC-2 maximum	400 1/h	
■ at AC-4 maximum Control executif Centrol Verye of voltage of the control supply voltage Control supply voltage at AC ■ at 60 Hz rated value ■ at 60 Hz rated value 200 277 V Control supply voltage at CC ■ rated value 200 277 V Control supply voltage at CC ■ rated value Operating range factor control supply voltage rated value of magnet coil at DC ● initial value ■ full-scale value Operating range factor control supply voltage rated value of magnet coil at AC ■ at 60 Hz ■ at 60 Hz ■ at 60 Hz ■ at 60 Hz ■ control input according to IEC 69947-1 ■ consumed current at PLC-control input according to IEC 69947-1 □ vpe of PLC-control input rated value voltage at PLC-control input value vol	at AC-3 maximum	1 000 1/h	
Section Control circuit/ Control supply voltage AC/DC	at AC-3e maximum	1 000 1/h	
type of voltage of the control supply voltage control supply voltage at AC • at 60 Hz rated value 200 277 V control supply voltage at DC • rated value 200 277 V control supply voltage at DC • rated value 200 277 V control supply voltage at DC • rated value 200 277 V control supply voltage at DC • rated value 200 277 V control supply voltage rated value of magnet coil at DC • initial value • rull-scale value 0.8 • rull-scale valu	• at AC-4 maximum	130 1/h	
type of voltage of the control supply voltage control supply voltage at AC • at 60 Hz rated value 200 277 V control supply voltage at DC • rated value 200 277 V control supply voltage at DC • rated value 200 277 V control supply voltage at DC • rated value 200 277 V control supply voltage at DC • rated value 200 277 V control supply voltage rated value of magnet coil at DC • initial value • rull-scale value 0.8 • rull-scale valu	Control circuit/ Control		
control supply voltage at AC • at 50 Hz rated value • at 60 Hz voltage at DC • initial value • at 50 Hz • at 60 Hz • at 6		AC/DC	
• at 50 Hz rated value 200 277 V • at 60 Hz rated value 200 277 V • ar ated value 0 277 V • at 50 Hz 0 2 277 V • at 50 Hz 0 277 V • at 60 Hz 1 277	· · · · · · · · · · · · · · · · · · ·	7.0.50	
• at 60 Hz rated value control supply voltage at DC - rated value operating range factor control supply voltage rated value of magnet coil at DC - initial value - initial		200 277 V	
control supply voltage at DC			
Operating range factor control supply voltage rated value of magnet coil at DC Value coll at AC Value		200 277 V	
• Initial value • Ituli-scate value • Ituli-s	operating range factor control supply voltage rated value of		
e full-scale value operating range factor control supply voltage rated value of magnet coil at AC e at 50 Hz e at 60 Hz Type of PLC-control input according to IEC 60947-1 consumed current at PLC-control input according to IEC 60947-1 maximum voltage at PLC-control input rated value operating range factor of the voltage at PLC-control input design of the surge suppressor apparent pick-up power of magnet coil at AC e at 50 Hz e at 60 Hz at 50 Hz e at 60 Hz apparent pick by power of magnet coil at AC e at 50 Hz e at 60 Hz e at		0.0	
operating range factor control supply voltage rated value of magnet coil at AC at 50 Hz bat 60 Hz consumed current at PLC-control input according to IEC 60947-1 Type 2 consumed current at PLC-control input according to IEC 60947-1 consumed current at PLC-control input according to IEC 60947-1 maximum voltage at PLC-control input rated value operating range factor of the voltage at PLC-control input design of the surge suppressor apparent pick-up power of magnet coil at AC at 50 Hz bat 60 Hz at 60 Hz at 60 Hz bat 60 Hz bat 60 Hz as 60 Hz bat 60 Hz			
magnet coil at AC • at 50 Hz • at 60 Hz • at 60947-1 maximum • at 60947-1 maximum • at 50 Hz			
• at 60 Hz Type 0 PLC-control input according to IEC 60947-1 Type 2	magnet coil at AC		
type of PLC-control input according to IEC 60947-1 consumed current at PLC-control input according to IEC 60947-1 mysimum voltage at PLC-control input rated value voltage at PLC-control input rated value operating range factor of the voltage at PLC-control input design of the surge suppressor apparent plck-up power of magnet coil at AC at 50 Hz at 60 Hz binductive power factor with the holding power of the coil at 50 Hz at 60 Hz at 60 Hz at 60 Hz binductive power factor with the holding power of the coil at 50 Hz at 60 Hz binductive power factor with the holding power of the coil at 50 Hz at 60 Hz binductive power factor with the holding power of the coil at 50 Hz at 60 Hz binductive power factor with the holding power of the coil at 50 Hz binductive power factor with the holding power of the coil at 50 Hz binductive power factor with the holding power of the coil at 50 Hz binductive power factor with the holding power of the coil at 50 Hz binductive power factor with the holding power of the coil at 50 Hz binductive power factor with the holding power of the coil at 50 Hz binductive power factor with the holding power of the coil at 50 Hz binductive power factor with the holding power of the coil at 50 Hz binductive power factor with the holding power of the coil at 50 Hz binductive power factor with the holding power of the coil at 50 Hz binductive power factor with the holding power of the coil at 50 Hz binductive power factor with the holding power of the coil at 50 Hz binductive power factor with the holding power of the coil at 50 Hz binductive power factor with the holding power of the coil at 50 Hz binductive power factor with the holding power of the coil at 50 Hz binductive power factor with the holding power of the coil at 50 Hz binductive power factor with the holding power of the coil binductive power factor with the holding power of the coil b	• at 50 Hz		
consumed current at PLC-control input according to IEC 60947-f maximum voltage at PLC-control input rated value operating range factor of the voltage at PLC-control input design of the surge suppressor apparent pick-up power of magnet coil at AC	● at 60 Hz	0.8 1.1	
voltage at PLC-control input rated value operating range factor of the voltage at PLC-control input design of the surge suppressor apparent pick-up power of magnet coil at AC • at 50 Hz • at 60 Hz • at 50 Hz • at 60 Hz • at 50 Hz • at 60 Hz apparent holding power of magnet coil at AC • at 50 Hz • at 60 Hz As was a fee Hz apparent holding power of magnet coil at AC • at 50 Hz • at 60 Hz • at 60 Hz As WA • at 60 Hz closing power factor with the holding power of the coil • at 50 Hz • at 60 Hz • at 60 Hz • at 60 Hz • at 60 Hz • at 60 Hz • at 60 Hz closing power of magnet coil at DC closing power of magnet coil at DC closing power of magnet coil at DC closing delay • at AC • at DC opening delay • at AC • at DC • at	type of PLC-control input according to IEC 60947-1	Type 2	
operating range factor of the voltage at PLC-control input design of the surge suppressor apparent plck-up power of magnet coil at AC • at 50 Hz • at 60 Hz • at 50 Hz • at 60 Hz apparent holding power of magnet coil at AC • at 50 Hz • at 60 Hz apparent holding power of magnet coil at AC • at 50 Hz • at 60 Hz Inductive power factor with the holding power of the coil • at 50 Hz • at 60 Hz • at 60 Hz closing power of magnet coil at DC holding power of magnet coil at DC closing delay • at AC • at DC arcing time control version of the switch operating mechanism PLC-IN or Standard A1 - A2 (adjustable) Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact		20 mA	
design of the surge suppressor apparent pick-up power of magnet coil at AC at 50 Hz at 50 Hz at 50 Hz at 50 Hz at 60 Hz at 60 Hz at 50 Hz at 60 Hz below at 50 Hz below at 50 Hz below at 50 Hz at 50 Hz at 50 Hz below at 50 Hz closing power of magnet coil at DC closing power of magnet coil at DC closing power of magnet coil at DC at AC at A	voltage at PLC-control input rated value	24 V	
apparent pick-up power of magnet coil at AC at 50 Hz at 60 Hz bullet 280 VA inductive power factor with closing power of the coil at 50 Hz bullet 60 Hz bullet	operating range factor of the voltage at PLC-control input	0.8 1.1	
	design of the surge suppressor	with varistor	
■ at 60 Hz inductive power factor with closing power of the coil ■ at 50 Hz ■ at 60 Hz ■ at 60 Hz apparent holding power of magnet coil at AC ■ at 50 Hz ■ at 60 Hz inductive power factor with the holding power of the coil ■ at 50 Hz ■ at 60 Hz □ at 6	apparent pick-up power of magnet coil at AC		
inductive power factor with closing power of the coil at 50 Hz at 60 Hz apparent holding power of magnet coil at AC at 50 Hz at 50 Hz at 60 Hz 4.8 VA at 60 Hz inductive power factor with the holding power of the coil at 50 Hz at 50 Hz at 60 Hz closing power of magnet coil at DC closing power of magnet coil at DC bolding power of magnet coil at DC closing delay at AC at DC bolding power of magnet coil at DC at AC at DC bolding the magnet coil at DC at AC at DC bolding the magnet coil at DC at AC at DC bolding the magnet coil at DC at AC at DC bolding the magnet coil at DC at AC at DC bolding the magnet coil at DC at AC at DC bolding the magnet coil at DC at AC at DC bolding the magnet coil at DC at AC bolding the magnet coil at DC at AC bolding the magnet coil at DC bolding the magnet coil at DC at AC bolding power of magnet coil at DC at AC bolding power of magnet coil at DC coil at DC at AC bolding power of magnet coil at DC coil at DC at AC bolding power of magnet coil at DC coil at DC at AC bolding power of magnet coil at DC coil at DC at AC bolding power of magnet coil at DC coil at DC at AC bolding power of magnet coil at DC coil	● at 50 Hz	280 VA	
at 50 Hz at 60 Hz apparent holding power of magnet coil at AC at 50 Hz at 60 Hz at 60 Hz 4.8 VA at 60 Hz bulleting power factor with the holding power of the coil at 50 Hz bulleting power factor with the holding power of the coil at 50 Hz bulleting power of magnet coil at DC bulleting power of magnet	• at 60 Hz	280 VA	
apparent holding power of magnet coil at AC at 50 Hz at 60 Hz 4.8 VA at 60 Hz 4.8 VA inductive power factor with the holding power of the coil at 50 Hz at 60 Hz 0.6 at 60 Hz 0.6 closing power of magnet coil at DC 320 W holding power of magnet coil at DC 2.8 W closing delay at AC at DC onening delay at AC at DC bo mos arcing time control version of the switch operating mechanism PLC-IN or Standard A1 - A2 (adjustable) Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact	inductive power factor with closing power of the coil		
apparent holding power of magnet coil at AC • at 50 Hz • at 60 Hz inductive power factor with the holding power of the coil • at 50 Hz • at 60 Hz • at 60 Hz • at 60 Hz closing power of magnet coil at DC holding power of magnet coil at DC 2.8 W closing delay • at AC • at DC opening delay • at AC • at DC at AC • at DC at AC • at DC copening delay • at AC • at DC at DC at DC at DC bo ming delay • at AC • at DC • a	● at 50 Hz	0.8	
at 50 Hz at 60 Hz at 60 Hz but 4.8 VA 4.8 VA 4.8 VA 4.8 VA 4.8 VA 4.8 VA inductive power factor with the holding power of the coil at 50 Hz but 60 Hz	● at 60 Hz	0.8	
at 60 Hz inductive power factor with the holding power of the coil at 50 Hz at 60 Hz closing power of magnet coil at DC holding power of magnet coil at DC closing delay at AC at DC opening delay at AC at AC opening delay at AC at AC opening delay opening delay at AC opening delay opening	apparent holding power of magnet coil at AC		
inductive power factor with the holding power of the coil at 50 Hz bit 150 Hz closing power of magnet coil at DC closing power of magnet coil at DC bit 150 Hz closing delay bit 150 Hz bit 150 Hz closing delay bit 150 Hz bit 150 Hz closing delay bit 150 Hz bit 150	• at 50 Hz	4.8 VA	
	• at 60 Hz	4.8 VA	
o at 60 Hz closing power of magnet coil at DC holding power of magnet coil at DC closing delay o at AC o at DC opening delay o at AC o at DC at AC ot AC	inductive power factor with the holding power of the coil		
closing power of magnet coil at DC holding power of magnet coil at DC 2.8 W closing delay at AC at DC 35 75 ms opening delay at AC at DC 80 90 ms at DC 80 90 ms arcing time 10 15 ms control version of the switch operating mechanism PLC-IN or Standard A1 - A2 (adjustable) Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact	• at 50 Hz	0.6	
holding power of magnet coil at DC closing delay	• at 60 Hz	0.6	
closing delay • at AC • at DC 35 75 ms opening delay • at AC • at DC 80 90 ms • at DC 80 90 ms arcing time 10 15 ms control version of the switch operating mechanism PLC-IN or Standard A1 - A2 (adjustable) Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact	closing power of magnet coil at DC	320 W	
 at AC at DC 35 75 ms opening delay at AC at DC at DC at DC at DC arcing time 10 15 ms control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact 2 2 2 2 2 35 75 ms 36 90 ms 40 90 ms 41 15 ms PLC-IN or Standard A1 - A2 (adjustable) Auxiliary circuit 2 2 2 2 2 2 2 2 2 36 90 ms 41 15 ms 2 2 2 2 36 90 ms 42 15 ms 43 15 ms 44 15 ms 5 15 ms 45 15 ms 46 15 ms 47 15 ms 48 15 ms 5 15 ms 2 40 15 ms 2 40 15 ms 40	holding power of magnet coil at DC	2.8 W	
at DC opening delay at AC at DC at DC arcing time arcing time control version of the switch operating mechanism Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact 2 35 75 ms 80 90 ms 80 90 ms 10 15 ms PLC-IN or Standard A1 - A2 (adjustable) 2	closing delay		
opening delay	• at AC	35 75 ms	
 at AC at DC 80 90 ms arcing time 10 15 ms control version of the switch operating mechanism PLC-IN or Standard A1 - A2 (adjustable) Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact 	• at DC	35 75 ms	
● at DC arcing time 10 15 ms control version of the switch operating mechanism PLC-IN or Standard A1 - A2 (adjustable) Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact 2	opening delay		
arcing time control version of the switch operating mechanism PLC-IN or Standard A1 - A2 (adjustable) Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact 2	• at AC	80 90 ms	
control version of the switch operating mechanism PLC-IN or Standard A1 - A2 (adjustable) Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact 2	• at DC	80 90 ms	
Auxiliary circuit number of NC contacts for auxiliary contacts instantaneous contact 2	arcing time	10 15 ms	
number of NC contacts for auxiliary contacts instantaneous contact	control version of the switch operating mechanism	PLC-IN or Standard A1 - A2 (adjustable)	
contact	Auxiliary circuit		
		2	
number of NO contacts for auxiliary contacts instantaneous 2 contact	number of NO contacts for auxiliary contacts instantaneous	2	

operational current at AC-12 maximum	10 A	
operational current at AC-15		
at 230 V rated value	6 A	
• at 400 V rated value	3 A	
• at 500 V rated value	2 A	
at 690 V rated value	1 A	
operational current at DC-12		
at 24 V rated value	10 A	
• at 48 V rated value	6 A	
at 60 V rated value	6 A	
at 110 V rated value	3 A	
• at 125 V rated value	2 A	
• at 220 V rated value	1 A	
at 600 V rated value	0.15 A	
operational current at DC-13		
• at 24 V rated value	10 A	
 at 48 V rated value 	2 A	
• at 60 V rated value	2 A	
• at 110 V rated value	1 A	
• at 125 V rated value	0.9 A	
• at 220 V rated value	0.3 A	
• at 600 V rated value	0.1 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	124 A	
at 600 V rated value	125 A	
yielded mechanical performance [hp]		
• for single-phase AC motor		
— at 230 V rated value	25 hp	
• for 3-phase AC motor	20.15	
— at 200/208 V rated value	40 hp	
— at 220/230 V rated value	50 hp	
— at 460/480 V rated value	100 hp	
— at 575/600 V rated value	125 hp	
contact rating of auxiliary contacts according to UL	A600 / Q600	
Short-circuit protection	A000 / Q000	
design of the fuse link		
for short-circuit protection of the main circuit	~C. 255 A (600 V 400 kA)	
— with type of coordination 1 required	gG: 355 A (690 V, 100 kA)	
— with type of assignment 2 required	gG: 250 A (690 V, 100 kA), aM: 200 A (690 V, 50 kA), BS88: 250 A (415 V, 50 kA)	
for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)	
Installation/ mounting/ dimensions	J	
mounting position	with vertical mounting surface +/-90° rotatable, with vertical mounting surface	
mounting position	+/- 22.5° tiltable to the front and back	
fastening method	screw fixing	
side-by-side mounting	Yes	
height	172 mm	
width	120 mm	
depth	170 mm	
required spacing		
with side-by-side mounting		
— forwards	20 mm	
— upwards	10 mm	
— upwards — downwards	10 mm	
— at the side	0 mm	
	O TIIIII	
for grounded parts forwards	20 mm	
— forwards		
— upwards— at the side	10 mm 10 mm	

— downwards	10 mm	
• for live parts		
— forwards	20 mm	
— upwards	10 mm	
— downwards	10 mm	
— at the side	10 mm	
Connections/ Terminals		
type of electrical connection		
for main current circuit	Connection bar	
for auxiliary and control circuit	screw-type terminals	
at contactor for auxiliary contacts	Screw-type terminals	
of magnet coil	Screw-type terminals	
width of connection bar	17 mm	
thickness of connection bar	3 mm	
diameter of holes	9 mm	
number of holes	1	
connectable conductor cross-section for main contacts		
• stranded	25 120 mm²	
connectable conductor cross-section for auxiliary contacts		
 solid or stranded 	0.5 4 mm²	
 finely stranded with core end processing 	0.5 2.5 mm²	
type of connectable conductor cross-sections		
 for auxiliary contacts 		
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)	
— solid or stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), max. 2x (0,75 4 mm²)	
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	
for AWG cables for auxiliary contacts	2x (20 16), 2x (18 14), 1x 12	
AWG number as coded connectable conductor cross section		
for auxiliary contacts	18 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	
T1 value for proof test interval or service life according to IEC 61508	20 a	
protection class IP on the front according to IEC 60529	IP00; IP20 with box terminal/cover	
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front with box terminal/cover	
suitability for use		
 safety-related switching OFF 	Yes	
Certificates/ approvals		

General Product Approval



Confirmation





<u>KC</u>



Functional

EMC Safety/Safety of Machinery Declaration of Conformity Test Certificates



Type Examination Certificate

CE EG-Konf.



Special Test Certificate

Type Test Certificates/Test Report

Marine / Shipping other













other		Railway	
<u>Miscellaneous</u>	Confirmation	Special Test Certific-	<u>Vibration and Shock</u>

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=3RT1054-6NP38-0PA5

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1054-6NP38-0PA5

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT1054-6NP38-0PA5

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

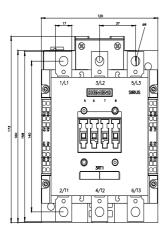
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1054-6NP38-0PA5&lang=en

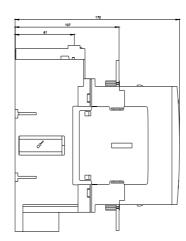
Characteristic: Tripping characteristics, I2t, Let-through current

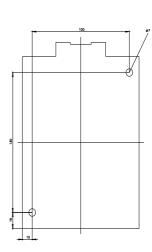
https://support.industry.siemens.com/cs/ww/en/ps/3RT1054-6NP38-0PA5/char

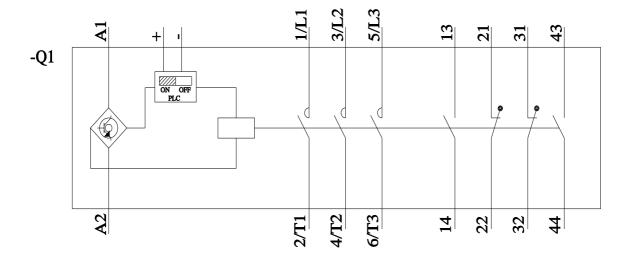
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1054-6NP38-0PA5&objecttype=14&gridview=view1









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