Data sheet 3RT2037-3XF44-0LA2



traction contactor, AC-3e/AC-3, 65 A, 30 kW / 400 V, 3-pole, 110 V DC, 0.7-1.25 * Us, electronic drive, with integrated varistor, auxiliary contacts: 2 NO + 2 NC, main circuit: screw terminal, control and auxiliary circuit: spring-loaded terminal, size: S2, removable auxiliary switch

product brand name	SIRIUS
product designation	Power contactor
design of the product	With extended operating range
product type designation	3RT2
General technical data	
size of contactor	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 protective separation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at DC	6.1g / 5 ms, 3.7g / 10 ms
shock resistance with sine pulse	
• at DC	9.6g / 5 ms, 5.8g / 10 ms
mechanical service life (operating cycles)	
 of contactor typical 	10 000 000
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000
 of the contactor with added auxiliary switch block typical 	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2014
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
 during operation 	-40 +70 °C
during storage	-55 +80 °C
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
Main 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 	690 V
at AC-3e rated value maximum	690 V
operational current	
• at AC-1 at 400 V at ambient temperature 40 °C rated	80 A
value	
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	80 A
— up to 690 V at ambient temperature 60 $^{\circ}\text{C}$ rated value	70 A
at AC-2 at 400 V rated value	65 A
• 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
minimum cross-section in main circuit	
at maximum AC-1 rated value	25 mm²
at maximum Ith rated value	25 mm ²
operational current for approx. 200000 operating cycles at AC-4	
at 400 V rated value	28 A
at 690 V rated value	22 A
operational current	
at 1 current path at DC-1	
— at 24 V rated value	55 A
— 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 110 v rated value	1 A
— at 220 V rated value	• • •
— at 220 V rated value — at 440 V rated value	0.1.4
— at 440 V rated value	0.1 A
— at 440 V rated value — at 600 V rated value	0.1 A 0.06 A
 at 440 V rated value at 600 V rated value with 2 current paths in series at DC-3 at DC-5 	0.06 A
 at 440 V rated value at 600 V rated value with 2 current paths in series at DC-3 at DC-5 at 24 V rated value 	0.06 A 55 A
 at 440 V rated value at 600 V rated value with 2 current paths in series at DC-3 at DC-5 at 24 V rated value at 110 V rated value 	0.06 A 55 A 25 A
 at 440 V rated value at 600 V rated value with 2 current paths in series at DC-3 at DC-5 at 24 V rated value at 110 V rated value at 220 V rated value 	0.06 A 55 A 25 A 5 A
 at 440 V rated value at 600 V rated value with 2 current paths in series at DC-3 at DC-5 at 24 V rated value at 110 V rated value 	0.06 A 55 A 25 A

— 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	
at AC-2 at 400 V rated value	30 kW
• at AC-3	
— 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	OT NOV
— at 230 V rated value	18.5 kW
	30 kW
— at 400 V rated value	
— at 500 V rated value	37 kW
— at 690 V rated value	37 kW
operating power for approx. 200000 operating cycles at AC-	
at 400 V rated value	14.7 kW
at 400 V rated value at 690 V rated value	20 kW
short-time withstand current in cold operating state up to	
40 °C	
 limited to 1 s switching at zero current maximum 	1 055 A; Use minimum cross-section acc. to AC-1 rated value
limited to 5 s switching at zero current maximum	730 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	520 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	336 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 60 s switching at zero current maximum 	272 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	,
• at DC	1 500 1/h
operating frequency	. 000
at AC-2 at AC-3e maximum	400 1/h
	100 1/11
	200 1/h
• at AC-4 maximum	200 1/h
• at AC-4 maximum Ratings for railway applications	200 1/h
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V	
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value	80 A
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value	
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value Control circuit/ Control	80 A 60 A
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value Control circuit/ Control type of voltage	80 A 60 A DC
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value Control circuit/ Control type of voltage type of voltage of the control supply voltage	80 A 60 A
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value Control circuit/ Control type of voltage type of voltage of the control supply voltage control supply voltage at DC	80 A 60 A DC DC
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value Control circuit/ Control type of voltage type of voltage of the control supply voltage control supply voltage at DC rated value	80 A 60 A DC
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value Control circuit/ Control type of voltage type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC	80 A 60 A DC DC 110 V
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value Control circuit/ Control type of voltage type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value	80 A 60 A DC DC 110 V
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value Control circuit/ Control type of voltage type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value	80 A 60 A DC DC 110 V
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value Control circuit/ Control type of voltage type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value design of the surge suppressor	80 A 60 A DC DC 110 V
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value Control circuit/ Control type of voltage type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value design of the surge suppressor inrush current peak	80 A 60 A DC DC 110 V 0.7 1.25 with varistor 1.5 A
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value Control circuit/ Control type of voltage type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value design of the surge suppressor inrush current peak duration of inrush current peak	80 A 60 A DC DC 110 V 0.7 1.25 with varistor 1.5 A 50 μs
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value Control circuit/ Control type of voltage type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value design of the surge suppressor inrush current peak duration of inrush current peak locked-rotor current mean value	80 A 60 A DC DC 110 V 0.7 1.25 with varistor 1.5 A 50 μs 0.45 A
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value Control circuit/ Control type of voltage type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value design of the surge suppressor inrush current peak duration of inrush current peak	80 A 60 A DC DC 110 V 0.7 1.25 with varistor 1.5 A 50 μs 0.45 A 0.8 A
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value Control circuit/ Control type of voltage type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value design of the surge suppressor inrush current peak duration of inrush current peak locked-rotor current mean value	80 A 60 A DC DC 110 V 0.7 1.25 with varistor 1.5 A 50 μs 0.45 A
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value Control circuit/ Control type of voltage type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value design of the surge suppressor inrush current peak duration of inrush current peak locked-rotor current mean value locked-rotor current peak	80 A 60 A DC DC 110 V 0.7 1.25 with varistor 1.5 A 50 μs 0.45 A 0.8 A
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value Control circuit/ Control type of voltage type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value design of the surge suppressor inrush current peak duration of inrush current peak locked-rotor current mean value locked-rotor current peak duration of locked-rotor current	80 A 60 A DC DC 110 V 0.7 1.25 with varistor 1.5 A 50 μs 0.45 A 0.8 A 230 ms
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value Control circuit/ Control type of voltage type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value design of the surge suppressor inrush current peak duration of inrush current peak locked-rotor current mean value locked-rotor current mean value locked-rotor current mean value	80 A 60 A DC DC 110 V 0.7 1.25 with varistor 1.5 A 50 μs 0.45 A 0.8 A 230 ms 12 mA
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value Control circuit/ Control type of voltage type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value design of the surge suppressor inrush current peak duration of inrush current peak locked-rotor current mean value locked-rotor current mean value closing power of magnet coil at DC	80 A 60 A DC DC 110 V 0.7 1.25 with varistor 1.5 A 50 μs 0.45 A 0.8 A 230 ms 12 mA 23 W
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value Control circuit/ Control type of voltage type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value design of the surge suppressor inrush current peak duration of inrush current peak locked-rotor current mean value locked-rotor current mean value closing power of magnet coil at DC holding power of magnet coil at DC	80 A 60 A DC DC 110 V 0.7 1.25 with varistor 1.5 A 50 μs 0.45 A 0.8 A 230 ms 12 mA 23 W
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value Control circuit/ Control type of voltage type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value design of the surge suppressor inrush current peak duration of inrush current peak locked-rotor current mean value locked-rotor current mean value closing power of magnet coil at DC holding power of magnet coil at DC closing delay	80 A 60 A DC DC 110 V 0.7 1.25 with varistor 1.5 A 50 µs 0.45 A 0.8 A 230 ms 12 mA 23 W 1 W
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value Control circuit/ Control type of voltage type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value design of the surge suppressor inrush current peak duration of inrush current peak locked-rotor current mean value locked-rotor current mean value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC	80 A 60 A DC DC 110 V 0.7 1.25 with varistor 1.5 A 50 µs 0.45 A 0.8 A 230 ms 12 mA 23 W 1 W
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value Control circuit/ Control type of voltage type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value design of the surge suppressor inrush current peak duration of inrush current peak locked-rotor current mean value locked-rotor current mean value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay	80 A 60 A DC DC 110 V 0.7 1.25 with varistor 1.5 A 50 µs 0.45 A 0.8 A 230 ms 12 mA 23 W 1 W 35 110 ms
at AC-4 maximum Ratings for railway applications thermal current (Ith) up to 690 V up to 40 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value Control circuit/ Control type of voltage type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value design of the surge suppressor inrush current peak duration of inrush current peak locked-rotor current mean value locked-rotor current mean value closing power of magnet coil at DC holding power of magnet coil at DC closing delay at DC opening delay at DC	80 A 60 A DC DC 110 V 0.7 1.25 with varistor 1.5 A 50 μs 0.45 A 0.8 A 230 ms 12 mA 23 W 1 W 35 110 ms

Institute out of IAC contacts for auxillary contacts 2 2 2 2 2 2 2 2 2	Auxiliary circuit	
misentaneous contact 2 2 2 2 2 2 2 2 2		2
mulmor of NO contacts for sucillary contacts 2		
ministratura ous contact	number of NO contacts for auxiliary contacts	2
	-	2
# at 230 V rated value	·	
1500 V rated value	•	6 A
* at 690 V rated value 10 A	at 400 V rated value	3 A
	at 500 V rated value	2 A
• at 24 V rated value	at 690 V rated value	1 A
** alt 48 V rated value	operational current at DC-12	
• at 160 V rated value	at 24 V rated value	10 A
• al 110 V rated value	at 48 V rated value	6 A
• al 125 V rated value	at 60 V rated value	6 A
• at 220 V rated value	• at 110 V rated value	3 A
• at 600 V rated value 0,15 A • at 24 V rated value 6 A • at 48 V rated value 2 A • at 160 V rated value 1 A • at 170 V rated value 0.9 A • at 120 V rated value 0.3 A • at 220 V rated value 0.1 A • at 220 V rated value 0.1 A • at 6000 V rated value 65 A • at 480 V rated value 52 A • at 480 V rated value 52 A • for single-phase AC motor 65 A • at 200 V rated value 5 hp • for single-phase AC motor 10 hp • at 200 V rated value 20 hp • for 3-phase AC motor 20 hp • at 200 V rated value 20 hp • at 200 V rated value 20 hp • at 200 V rated value 50 hp • at 57560 V rated value 50 hp • at 57560 V rated value 50 hp • or short-circuit protection A600 / O600 Short-crult protection of the main circuit 60 rate short-circuit protection of the main circuit • for short-circuit protection of the auxiliary switch	at 125 V rated value	2 A
Operational current at DC-13 * 12' 4V rated value		1 A
Operational current at DC-13 * 12' 4V rated value	• at 600 V rated value	0.15 A
• at 24 V rated value		
	•	6 A
• at 16 V rated value		
• at 110 V rated value 0.9 A • at 125 V rated value 0.3 A • at 260 V rated value 0.1 A • at 600 V rated value 0.1 A UUCSA ratings Full-load current (FLA) for 3-phase AC motor • at 480 V rated value 65 A • at 800 V rated value 52 A • for single-phase AC motor − at 230 V rated value • at 7110/120 V rated value 5 hp • at 220 V rated value 20 hp • at 220/280 V rated value 20 hp • at 220/280 V rated value 50 hp • at 460/480 V rated value 50 hp • at 460/480 V rated value 50 hp • at 460/480 V rated value 50 hp • at 75/5/600 V rated value 50 hp • contact rating of auxiliary contacts according to UL 8000 / Q600 Short-circuit protection No 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) • for short-circuit protection of the auxiliary switch		
	• at 110 V rated value	
• at 220 V rated value 0.1 A LUCSA ratings Full-load current (FLA) for 3-phase AC motor • at 480 V rated value 65 A • at 600 V rated value 52 A y felded mechanical performance [hp] For single-phase AC motor • at 230 V rated value 5 hp • for 3-phase AC motor 10 hp • at 230 V rated value 10 hp • for 3-phase AC motor 20 hp • at 2200/230 V rated value 20 hp • at 420/480 V rated value 50 hp • ontact rating of auxiliary contacts according to UL A600 / 0600 Short-circuit protection No design of the fuse link • for short-circuit protection of the main circuit • for short-circuit protection of the main circuit gG: 250 A (690 V, 100 kA), aM: 160 A (690 V, 100 kA), BS88: 200 A (415 V, 80 kA) • for short-circuit protection of the auxiliary switch required gG: 125 A (690 V, 100 kA), aM: 63A (690 V, 100 kA), BS88: 100A (415 V, 80 kA) <t< td=""><td></td><td></td></t<>		
full-load current (FLA) for 3-phase AC motor • at 480 V rated value 65 A • at 800 V rated value 55 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 10 hp • for 3-phase AC motor — at 230 V rated value 20 hp • for 3-phase AC motor — at 200/208 V rated value 20 hp — at 220/230 V rated value 20 hp — at 220/230 V rated value 20 hp — at 220/230 V rated value 40 hp — at 460/480 V rated value 50 hp — at 460/480 V rated value 50 hp — at 575/500 V rated value 60 hp — at 575/500 V rated value 80 hp — at 60 hp — at 75/500 V rated value 80 hp — at 60 hp — at 75/500 V rated value 80 hp — at 60 hp — at 75/500 V rated value 80 hp — at 60 hp — at 75/500 V rated value 80 hp — at 60 hp — at 75/500 V rated value 90 hp — at 60 hp — a	at 220 V rated value	0.3 A
### stable of the stable of the main circuit full-load current (FLA) for 3-phase AC motor at 480 V rated value 52 A yielded mechanical performance [hp] • for single-phase AC motor	at 600 V rated value	0.1 A
### stable of the stable of the main circuit full-load current (FLA) for 3-phase AC motor at 480 V rated value 52 A yielded mechanical performance [hp] • for single-phase AC motor	UL/CSA ratings	
• at 480 V rated value 52 A • at 600 V rated value 52 A yielded mechanical performance [hp] • for single-phase AC motor — 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 50 hp — at 450/480 V rated value 50 hp contact rating of auxiliary contacts according to UL 6800 / 0600 Short-circuit protection No design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required 3C: 250 A (690 V, 100 kA), aM: 160 A (690 V, 100 kA), BS88: 200 A (415 V, 80 kA) • for short-circuit protection of the auxiliary switch required 3C: 125A (690V,100kA), aM: 63A (690V,100kA), BS88: 100A (415V,80kA) • for short-circuit protection of the auxiliary switch required 3C: 125A (690V,100kA), aM: 63A (690V,100kA), BS88: 100A (415V,80kA) • for short-circuit protection of the auxiliary switch required 3C: 125A (690V,100kA), aM: 63A (690V,100kA), BS88: 100A (415V,80kA) • for short-circuit protection of the auxiliary switch required 3C: 125A (690V,100kA), aM: 63A (690V,100kA), BS88: 100A (415V,80kA) • for short-circuit protection of the auxiliary switch required 3C: 125A (690V,100kA), aM: 63A (690V,100kA), BS88: 100A (415V,80kA) • for short-circuit protection of the auxiliary switch required 3C: 125A (690V,100kA), aM: 63A (690V,100kA), BS88: 100A (415V,80kA) • for short-circuit protection of the auxiliary switch required 3C: 125A (690V,100kA), aM: 63A (690V,100kA), BS88: 100A (415V,80kA) • for short-circuit protection of the auxiliary switch required 3C: 125A (690V,100kA), aM: 63A (690V,100kA), BS88: 100A (415V,80kA) • for short-circuit protection of the auxiliary switch required 3C: 125A (690V,100kA), aM: 63A (690V,100kA), BS88: 100A (415V,80kA) • for short-circuit protection of the auxiliary switch required 3C: 125A (690V,100kA), aM: 63A (690V,100kA), BS88: 100A (415V,80kA) • for short-circuit protect		
yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value • for 3-phase AC motor — at 2300 V rated value • for 3-phase AC motor — at 220/230 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value — 50 hp contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection product function short circuit protection 4 for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required — or for short-circuit protection of the auxiliary switch required — with type of assignment 2 required — for short-circuit protection of the auxiliary switch required — side-by-side mounting fastening method — side-by-side mounting — forwards — with side-by-side mounting — forwards — 10 mm		65 A
of r single-phase AC motor — at 110/120 V rated value	at 600 V rated value	52 A
of r single-phase AC motor — at 110/120 V rated value	yielded mechanical performance [hp]	
- at 230 V rated value • for 3-phase AC motor - at 220/2208 V rated value - at 220/230 V rated value - at 240/230 V rated value - at 450/480 V rated value - at 450/480 V rated value - at 450/480 V rated value - at 575/600 V rated value 50 hp - at 575/600 V rated value 50 hp contact rating of auxiliary contacts according to UL A600 / Q600 Short-circuit protection product function short circuit protection which type of coordination 1 required - with type of coordination 1 required • for short-circuit protection of the main circuit - with type of assignment 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position - with speed of the success of the auxiliary switch required • side-by-side mounting • side-by-side mounting • with side-by-side mounting • required spacing • with side-by-side mounting	for single-phase AC motor	
• for 3-phase AC motor — at 220/208 V rated value 20 hp — at 220/230 V rated value 50 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 / Q600 Short-circuit protection No 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, 100 kA), 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 4/-180* rotation possible on vertical mounting surface; can be tilted forward and backward by 4/- 22.5* on vertical mounting surface fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 • side-by-side mounting #width fequired spacing • with side-by-side mounting • or moun	— at 110/120 V rated value	5 hp
- at 200/208 V rated value 20 hp - at 220/230 V rated value 50 hp - at 450/480 V rated value 50 hp - at 4575/600 V rated value 50 hp contact rating of auxiliary contacts according to UL 8600 / Q600 Short-circuit protection No design of the fuse link	— at 230 V rated value	10 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 / Q600 Short-circuit protection product function short circuit protection e 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, 100 kA), aM: 63A (690V, 100kA), BS88: 100A (415V,80kA) e 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 forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by side-by-side mounting e side-by-side mounting +14 mm required spacing e with side-by-side mounting - forwards 10 mm	• for 3-phase AC motor	
- at 460/480 V rated value 50 hp - at 575/600 V rated value 50 hp contact rating of auxiliary contacts according to UL Short-circuit protection product function short circuit protection design of the fuse link • for short-circuit protection 1 required — with type of coordination 1 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection • for short-circuit protection • trequired power form of the main circuit • for short-circuit protection • with side-by-side mounting • forwards • for short-circuit protection • forwards • for short-circuit protection • No • for short-circuit protection • forwards • for short-circuit protection • forwards • for short-circuit protection • forwards • forward	— at 200/208 V rated value	20 hp
- at 575/600 V rated value 50 hp contact rating of auxiliary contacts according to UL Short-circuit protection product function short circuit protection No design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required 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	— at 220/230 V rated value	20 hp
contact rating of auxiliary contacts according to UL Short-circuit protection product function short circuit protection A600 / Q600 Product function short circuit protection A600 / Q600 No 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 • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the main circuit • gG: 250 A (690 V, 100 kA), aM: 160 A (690 V, 100 kA), BS88: 200 A (415 V, 80 kA) • gG: 10 A (500 V, 1 kA) • sold-genuting of the suxiliary switch required • screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 • side-by-side mounting • side-by-side mounting • with side-by-side mounting • forwards 10 mm	— at 460/480 V rated value	50 hp
product function short circuit protection product function short circuit protection 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 • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the main circuit — with type of assignment 2 required • for short-circuit protection of the main circuit gG: 250 A (690 V, 100 kA), aM: 160 A (690 V, 100 kA), BS88: 200 A (415 V, 80 kA) gG: 125A (690V,100kA), aM: 63A (690V,100kA), BS88: 100A (415V,80kA) gG: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions #/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting s	— at 575/600 V rated value	50 hp
product function short circuit protection design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position #/-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 • side-by-side mounting #/-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 * side-by-side mounting #/-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 * side-by-side mounting #/	contact rating of auxiliary contacts according to UL	A600 / Q600
design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required gG: 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 • for short-circuit protection of the auxiliary switch required gG: 125A (690V,100kA), aM: 63A (690V,100kA), BS88: 100A (415V,80kA) • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position #/-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 • side-by-side mounting • side-by-side mounting ### 114 mm width ### 55 mm depth required spacing • with side-by-side mounting • with side-by-side mounting — forwards ### 10 mm	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 • for short-circuit protection of the auxiliary switch required gG: 125A (690V,100kA), aM: 63A (690V,100kA), BS88: 100A (415V,80kA) • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position #/-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 • side-by-side mounting • side-by-side mounting ### 114 mm width ### 55 mm depth required spacing • with side-by-side mounting • with side-by-side mounting — forwards ### 10 mm	product function short circuit protection	No
• 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 • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required • side-by-side mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be tilted forward and backward by	<u> </u>	
- 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 of r short-circuit protection of the auxiliary switch required gG: 125A (690V,100kA), aM: 63A (690V,100kA), BS88: 100A (415V,80kA) gG: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface fastening method oside-by-side mounting Yes height 114 mm width depth 178 mm required spacing with side-by-side mounting - forwards 10 mm	-	
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 forward and backward by +/- 22.5° on vertical mounting surface fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes height 114 mm width 55 mm depth 178 mm required spacing with side-by-side mounting — forwards 10 mm	•	
mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface fastening method • side-by-side mounting Yes height 114 mm width 55 mm depth 178 mm required spacing • with side-by-side mounting — forwards 10 mm	— with type of assignment 2 required	gG: 125A (690V,100kA), aM: 63A (690V,100kA), BS88: 100A (415V,80kA)
mounting position +/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface fastening method	• for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)
backward by +/- 22.5° on vertical mounting surface fastening method	Installation/ mounting/ dimensions	
● side-by-side mounting height 114 mm width 55 mm depth 178 mm required spacing ● with side-by-side mounting — forwards 10 mm	mounting position	
height width 55 mm depth 178 mm required spacing • with side-by-side mounting — forwards 10 mm	fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
width 55 mm depth 178 mm required spacing ● with side-by-side mounting — forwards 10 mm	side-by-side mounting	Yes
depth 178 mm required spacing • with side-by-side mounting — forwards 10 mm	height	114 mm
required spacing • with side-by-side mounting — forwards 10 mm	width	55 mm
 with side-by-side mounting forwards 10 mm 		178 mm
— forwards 10 mm	required spacing	
	with side-by-side mounting	
— upwards 10 mm	— forwards	10 mm
	— upwards	10 mm

	40
— 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 	spring-loaded terminals
 at contactor for auxiliary contacts 	Spring-type terminals
of magnet coil	Spring-type terminals
type of connectable conductor cross-sections for main contacts	
 solid or stranded 	2x (1 35 mm²), 1x (1 50 mm²)
finely stranded with core end processing	2x (1 25 mm²), 1x (1 35 mm²)
type of connectable conductor cross-sections	
 for auxiliary contacts 	
— solid or stranded	2x (0.5 2.5 mm²)
 finely stranded with core end processing 	2x (0.5 1.5 mm²)
 finely stranded without core end processing 	2x (0.5 2.5 mm²)
for AWG cables for auxiliary contacts	2x (20 14)
AWG number as coded connectable conductor cross section	
 for main contacts 	18 1
 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 a
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
Communication/ Protocol	
product function bus communication	No
Certificates/ approvals	

General Product Approval



Confirmation





<u>KC</u>



Functional EMC Safety/Safety of Machinery Declaration of Conformity Test Certificates	
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Type Examination Cer**tificate**





Special Test Certificate

Type Test Certificates/Test Report

Marine / Shipping













other Railway **Environment**

Confirmation **Special Test Certific-**Type Test Certific-Vibration and Shock **Environmental Con-**<u>ate</u> ates/Test Report firmations

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=3RT2037-3XF44-0LA2

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2037-3XF44-0LA2

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2037-3XF44-0

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

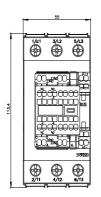
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2037-3XF44-0LA2&lang=en

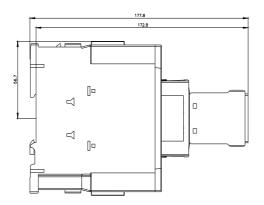
Characteristic: Tripping characteristics, I2t, Let-through current

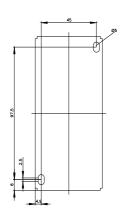
https://support.industry.siemens.com/cs/ww/en/ps/3RT20

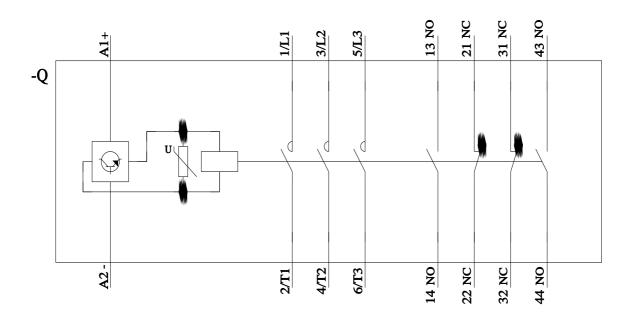
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2037-3XF44-0LA2&objecttype=14&gridview=view1









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