3RT2027-2XF40-0LA2

Data sheet



traction contactor, AC-3e/AC-3, 32 A, 15 kW / 400 V, 3-pole, 110 V DC, 0.7-1.25* Us, electronic drive, with integrated varistor, auxiliary contacts: 1 NO + 1 NC, spring-loaded terminal, size: S0

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	SO
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 	8.1 W
 at AC in hot operating state per pole 	2.7 W
 without load current share typical 	1.6 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	10g / 5 ms, 7,5g / 10 ms
shock resistance with sine pulse	
• at DC	15g / 5 ms, 10g / 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)	10/01/2009
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	50 A
value	
• at AC-1	
 up to 690 V at ambient temperature 40 °C rated value 	50 A
— up to 690 V at ambient temperature 60 °C rated value	42 A
• at AC-2 at 400 V rated value	32 A
• at AC-3	
— at 400 V rated value	32 A
— at 500 V rated value	32 A
— at 690 V rated value	21 A
• at AC-3e	
— at 400 V rated value	32 A
— at 500 V rated value	32 A
— at 690 V rated value	21 A
• at AC-4 at 400 V rated value	22 A
minimum cross-section in main circuit	
at maximum AC-1 rated value	10 mm²
at maximum Ith rated value	10 mm²
operational current for approx. 200000 operating cycles at	
AC-4 • at 400 V rated value	12 A
at 690 V rated value	12 A
operational current	
• at 1 current path at DC-1	05.4
— at 24 V rated value	35 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	35 A
— at 110 V rated value	35 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	35 A
— at 110 V rated value	35 A
— at 220 V rated value	35 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	20 A
— at 110 V rated value	2.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.09 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	35 A
— at 110 V rated value	15 A
— at 220 V rated value	3 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	35 A
— at 110 V rated value	35 A
— at 220 V rated value	10 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.6 A
operating power	
 at AC-2 at 400 V rated value 	15 kW
• at AC-3	
— at 230 V rated value	7.5 kW
— at 400 V rated value	15 kW
— at 500 V rated value	15 kW
— at 690 V rated value	18.5 kW
• at AC-3e	
— at 230 V rated value	7.5 kW
— at 400 V rated value	15 kW
— at 500 V rated value	15 kW
— at 690 V rated value	18.5 kW
operating power for approx. 200000 operating cycles at AC-	
4 a at 400 V rated value	C MAN
at 400 V rated value	6 kW
at 690 V rated value About time withstand suggest in cold answering state up to	10.3 kW
short-time withstand current in cold operating state up to 40 °C	
 limited to 1 s switching at zero current maximum 	499 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	341 A; Use minimum cross-section acc. to AC-1 rated value
limited to 10 s switching at zero current maximum	260 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	199 A; Use minimum cross-section acc. to AC-1 rated value
limited to 60 s switching at zero current maximum	162 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at DC	1 500 1/h
operating frequency	
• at AC-1 maximum	750 1/h
• at AC-2 maximum	750 1/h
• at AC-3 maximum	750 1/h
at AC-3e maximum	750 1/h
• at AC-2 at AC-3e maximum	750 1/h
• at AC-4 maximum	250 1/h
Ratings for railway applications	250 111
thermal current (Ith) up to 690 V	
up to 40 °C according to IEC 60077 rated value	50 A
up to 70 °C according to IEC 60077 rated value up to 70 °C according to IEC 60077 rated value	36 A
Control circuit/ Control	
type of voltage	DC
type of voltage type of voltage of the control supply voltage	DC
control supply voltage at DC	
• rated value	110 V
operating range factor control supply voltage rated value of magnet coil at DC	
• initial value	0.7
full-scale value	1.25
design of the surge suppressor	with varistor
inrush current peak	15 A
duration of inrush current peak	30 µs
locked-rotor current mean value	0.13 A
locked-rotor current peak	0.19 A
duration of locked-rotor current	180 ms
holding current mean value	19 mA
closing power of magnet coil at DC	13.2 W
holding power of magnet coil at DC	1.3 W
closing delay	1.0 11
at DC	50 75 ms
- 4(50	SS 10 IIIG

opening delay * at DIC* 3050 ms acroing time 1010 ms Control version of the switch operating mechanism Standard A1 - A2 Auxiliary derical 1 number of NC contacts for auxillary contacts 1 * instantaneous contact 1 number of NC contacts for auxillary contacts 1 * instantaneous contact 1 auxiliary contacts for auxiliary contacts 1 * instantaneous contact 1 * auxiliary contacts for auxiliary contacts 1 * auxiliary contacts 2 * auxiliary contacts 2		
Sandard A1 - A2		
Automative Contacts for auxiliary contacts		
Indicate of NC contacts for auxiliary contacts 1		Standard A1 - A2
mistantaneous contact 1		
Institution of NO contacts for auxiliary contacts 1 1 1 1 1 1 1 1 1		
misstantaneous contact 10 A 10		
Operational current at AC-15		
10 A 12 20 V rated value		
10 A 3 A	·	IU A
al 400 V rated value al 600 V rated value al 600 V rated value al 40 V rated value al 40 V rated value al 60 V rated value al 600 V rated value		10.4
• at 500 V rated value		
• at 690 V rated value		
0		
• at 24 V rated value		10
• at 48 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		
0		
at 24 V rated value	at 600 V rated value	0.15 A
e at 48 V rated value 2 A e at 60 V rated value 2 A e at 110 V rated value 1 A e at 125 V rated value 0.9 A e at 220 V rated value 0.3 A e at 220 V rated value 0.1 A ULCSA ratings full-load current (FLA) for 3-phase AC motor e at 480 V rated value 27 A e at 600 V rated value 27 A e at 600 V rated value 27 A e at 600 V rated value 27 A yielded mechanical performance [hp] e for single-phase AC motor — at 110/120 V rated value 2 hp e for 3-phase AC motor — at 220/230 V rated value 5 hp e for 3-phase AC motor — at 200/208 V rated value 10 hp — at 220/230 V rated value 20 hp — at 220/230 V rated value 20 hp — at 460/480 V rated value 20 hp — at 460/480 V rated value 20 hp — at 575/500 V rated value 25 hp contact rating of auxiliary contacts according to UL 800 / Q600 Short-circuit protection product function short circuit protection design of the fuse link e for short-circuit protection of the auxiliary switch required g. 500 A (500 V, 100kA), aM: 50A (690V, 100kA), BS88: 125A (415V, 80kA) gG: 50A (690V, 100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA) gG: 50A (690V, 100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA) gG: 50A (690V, 100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA) gG: 50A (690V, 100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA) gG: 50A (690V, 100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA) gG: 50A (690V, 100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA) gG: 50A (690V, 100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA) gG: 50A (690V, 100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA) gG: 50A (690V, 100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA) gG: 50A (690V, 100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA) gG: 50A (690V, 100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA) gG: 50A (690V, 100kA), aM: 50A (690V, 100kA), BS88: 50A (415V, 80kA) gG: 50A (690V, 100kA), aM: 50A (690V, 100kA), BS88: 50A (415V, 80kA) gG: 50A (690V, 100kA), aM: 50A (690V, 100kA), BS88: 50A (415V, 80kA) gG: 50A (690V, 100kA), aM: 50A (690V, 100kA), BS88: 50A (415V, 80kA) gG:	operational current at DC-13	
	• at 24 V rated value	10 A
	• at 48 V rated value	2 A
e at 125 V rated value e at 220 V rated value e at 600 V rated value e at 600 V rated value e at 600 V rated value 0.1 A UUCSA ratings full-load current (FLA) for 3-phase AC motor e at 480 V rated value 27 A yielded mechanical performance [hp] e for single-phase AC motor — at 110/120 V rated value 2 b p — at 230 V rated value 9 t for 3-phase AC motor — at 110/120 V rated value 9 t for 3-phase AC motor — at 200/230 V rated value 9 t for 3-phase AC motor — at 200/230 V rated value 9 t for 3-phase AC motor — at 200/230 V rated value 9 t for 3-phase AC motor — at 200/230 V rated value 9 t for 3-phase AC motor — at 200/208 V rated value 9 t for 3-phase AC motor — at 200/208 V rated value 9 to hp — at 575/600 V rated value 9 25 hp contact rating of auxiliary contacts according to UL 8600 / Q600 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 9 (S: 125A (690V,100KA), aM: 25A (690V,100KA), BS88: 125A (415V,80KA) 9 (S: 50A (690V,100KA), aM: 25A (690V,100KA), BS88: 50A (415V,80KA) 9 (S: 50A (690V,100KA), aM: 25A (690V,100KA), BS88: 50A (415V,80KA) 1 installation/ mounting/ dimensions mounting position fastening method • side-by-side mounting • side-by-side mounting ### width ### 45 mm ### depth	• at 60 V rated value	2 A
at 220 V rated value at 600 V rated value 0.3 A 0.1 A ULCSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value 27 A 27 A 27 A 28 A 48 OV rated value 29 A 40 (20 V rated value 20 A 21 A 22 A 23 A 24 A 25 A 26 A 27 A 27 A 28 A 29 Idded mechanical performance [hp] 40 for single-phase AC motor - at 110/120 V rated value 20 hp - at 230 V rated value 40 In 48 OV rated value 20 hp - at 220/230 V rated value 20 hp - at 220/230 V rated value 20 hp - at 460/480 V rated value 20 hp - at 460/480 V rated value 20 hp - at 375/600 V rated value 25 hp contact rating of auxiliary contacts according to UL 8000 / Q800 Short-circuit protection product function short circuit protection design of the fuse link 4 for short-circuit protection of the main circuit - with type of coordination 1 required 4 for short-circuit protection of the main circuit - with type of coordination 1 required 5 for 5 (600 V, 100kA), aM: 50A (690V, 100kA), BS88: 125A (415V, 80kA) 9 G: 50A (690V, 100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA) 9 G: 50A (690V, 100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA) 10 for short-circuit protection of the auxiliary switch required 4 for short-circuit protection of the auxiliary switch required 5 for 10 A (500 V, 1 kA) 10 for short-circuit protection of the auxiliary switch required 4 for short-circuit protection of the auxiliary switch required 5 for 3 for 4 for 5 for 7 for 100 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 +/- 20 for 1	• at 110 V rated value	1 A
• at 600 V rated value UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value 27 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 2 b p — at 230 V rated value 5 b p • for 3-phase AC motor — at 200/208 V rated value 10 hp — at 220/230 V rated value 2 b p — at 220/230 V rated value 2 b p — at 460/480 V rated value 2 b p — at 4575/600 V rated value 2 b p contact rating of auxiliary contacts according to UL 8600 / Q600 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 9G: 125A (690V,100KA), aM: 50A (690V,100KA), BS88: 125A (415V,80KA) 9 for short-circuit protection of the auxiliary switch required social contact rating of auxiliary switch required 9G: 50A (690V,100KA), aM: 25A (690V,100KA), BS88: 50A (415V,80KA) 9 for short-circuit protection of the auxiliary switch required social contact according to DIN EN 60715 • side-by-side mounting width 45 mm depth 107 mm	• at 125 V rated value	0.9 A
full-load current (FLA) for 3-phase AC motor • at 480 V rated value 27 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 2 hp — at 2200 V rated value 5 hp • for 3-phase AC motor — at 2200 V rated value 10 hp — at 2200/230 V rated value 10 hp — at 2200/230 V rated value 20 hp — at 460/480 V rated value 20 hp — at 460/480 V rated value 20 hp — at 575/600 V rated value 25 hp contact rating of auxiliary contacts according to UL 8600 / Q600 Short-circuit protection protection for the main circuit 4 with type of assignment 2 required 26 sign of the fuse link • for short-circuit protection of the auxiliary switch required 26 (360 V, 100kA), aM: 50A (690V, 100kA), BS88: 125A (415V, 80kA) • for short-circuit protection of the auxiliary switch required 26 (360 V, 100kA), aM: 25A (690V, 100kA), BS88: 25A (415V, 80kA) • for short-circuit protection of the auxiliary switch required 36 (360 V, 100kA), aM: 25A (690V, 100kA), BS88: 25A (415V, 80kA) • for short-circuit protection of the auxiliary switch required 36 (360 V, 100kA), aM: 25A (690V, 100kA), BS88: 25A (415V, 80kA) • for short-circuit protection of the auxiliary switch required 36 (360 V, 100kA), aM: 25A (690V, 100kA), BS88: 25A (415V, 80kA) • for short-circuit protection of the auxiliary switch required 36 (360 V, 100kA), aM: 25A (690V, 100kA), BS88: 25A (415V, 80kA) • for short-circuit protection of the auxiliary switch required 36 (360 V, 100kA), aM: 25A (690V, 100kA), BS88: 25A (415V, 80kA) • for short-circuit protection of the auxiliary switch required 36 (360 V, 100kA), aM: 25A (690V, 100kA), BS88: 25A (415V, 80kA) • for short-circuit protection of the auxiliary switch required 36 (360 V, 100kA), aM: 25A (690V, 100kA), BS88: 25A (415V, 80kA) • for short-circuit protection of the auxiliary switch required 36 (360 V, 100kA), aM: 25A (690V, 100kA), BS88: 25A (415V, 80kA) • for short-circuit protection of the auxiliary switch required 36 (360 V, 100kA), aM: 25A (690V, 100kA), BS88: 25A (415V, 80kA) • for short-circ	• at 220 V rated value	0.3 A
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value 27 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value — at 230 V rated value — at 230 V rated value 5 hp • for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value — at 220/230 V rated value — at 480/480 V rated value — at 480/480 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value 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 of the main circuit — with type of coordination 1 required 9G: 50A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A (415V,80kA) gG: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (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 screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes height width 45 mm depth		0.1 A
at 480 V rated value at 600 V rated value 27 A yielded mechanical performance [hp] of or single-phase AC motor — at 110/120 V rated value — at 230 V rated value — at 230 V rated value of or 3-phase AC motor — at 200/230 V rated value — 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 460/480 V rated value — at 575/600 V rated value — by the contact rating of auxiliary contacts according to UL Short-circuit protection product function short circuit protection design of the fuse link — with type of coordination 1 required — with type of assignment 2 required of or short-circuit protection of the main circuit — with type of assignment 2 required of sold (690V, 100kA), aM: 50A (690V, 100kA), BS88: 125A (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; can be tilted forward and backward by +/- 22.5° on vertical mounting surface; can be filted forward and backward by +/- 22.5° on vertical mounting surface; can be filted forward and backward by +/- 22.5° on vertical mounting surface; can be filted forward and backward by +/- 22.5° on vertical mounting surface; can be filted forward backward by +/- 22.5° on vertical mounting surface; can be filted forward backward by +/- 22.5° on vertical mounting surface; can be filted forward and backward by +/- 22.5° on vertical mounting surface; can be filted forward and backward by +/- 22.5° on vertical mounting surface; can be filted forward and backward by +/- 22.5° on vertical mounting surface; can be filted forward and backward by +/- 22.5° on vertical mounting surface; can be filted forward and backward by +/- 22.5° on vertical mounting surface; can be filted forward and backward by +/- 22.5° on vertical mounting surface; can be filted forward and backward	UL/CSA ratings	
* at 600 V rated value * yielded mechanical performance [hp] * for single-phase AC motor		
yielded mechanical performance [hp] • for single-phase AC motor — at 1101/20 V rated value 2 hp — at 230 V rated value 5 hp • for 3-phase AC motor — at 200/208 V rated value 10 hp — at 220/230 V rated value 20 hp — at 460/480 V rated value 20 hp — at 4575/600 V rated value 25 hp contact rating of auxiliary contacts according to UL 8600 / Q600 Short-circuit protection No design of the fuse link • for short-circuit protection of the main circuit — with type of coordination 1 required 9G: 50A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A (415V,80kA) 9G: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (415V,80kA) 9G: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (415V,80kA) 9G: 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 +/- 22.5° on vertical mounting surface fastening method 5 crew and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes height 102 mm width 45 mm depth		
• for single-phase AC motor — at 110/120 V rated value 2 hp — at 230 V rated value 5 hp • for 3-phase AC motor — at 200/208 V rated value 10 hp — at 220/230 V rated value 20 hp — at 220/230 V rated value 20 hp — at 460/480 V rated value 20 hp — at 575/600 V rated value 25 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 GF 500 (690V,100kA), aM: 50A (690V,100kA), BS88: 125A (415V,80kA) — with type of assignment 2 required GF 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (415V,80kA) • for short-circuit protection of the auxiliary switch required GF 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (415V,80kA) product function short circuit protection of the main circuit — with type of assignment 2 required GF 50A (690V,100kA), aM: 25A (690V,100kA), BS88: 125A (415V,80kA) • for short-circuit protection of the auxiliary switch required GF 50A (690V,100kA), aM: 25A (690V,100kA), BS88: 50A (415V,80kA) gc: 50A (690V,100kA), aM: 25A (690V,100kA), BS88: 50A (415V,80kA) gc: 50A (690V,100kA), aM: 25A (690V,100kA), BS88: 50A (415V,80kA) ### 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 mounti		27 A
- at 110/120 V rated value 2 hp - at 230 V rated value 5 hp • for 3-phase AC motor - at 220/230 V rated value 10 hp - at 220/230 V rated value 20 hp - at 6575/600 V rated value 25 hp contact rating of auxiliary contacts according to UL A600 / Q600 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 9G: 50A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A (415V,80kA) • for short-circuit protection of the auxiliary switch required 9G: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (415V,80kA) • for short-circuit protection of the auxiliary switch required 1nstallation/ 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 +/-22.5° on vertical mounting surface; can be calculated by Yes height 102 mm width 45 mm depth 107 mm		
- at 230 V rated value 5 hp • for 3-phase AC motor - at 200/208 V rated value 10 hp - at 220/230 V rated value 20 hp - at 460/480 V rated value 20 hp - at 575/600 V rated value 25 hp contact rating of auxiliary contacts according to UL 8600 / 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: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A (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 +/- 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 45 mm width 45 mm depth 107 mm		0.1
for 3-phase AC motor — at 200/208 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 — A600 / Q600 Short-circuit protection product function short circuit protection for short-circuit protection		·
- at 200/208 V rated value 10 hp 10		S IIP
- at 220/230 V rated value - at 460/480 V rated value 20 hp - at 575/600 V rated value 25 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 of the main circuit - with type of coordination 1 required 9G: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A (415V,80kA) - with type of assignment 2 required 9G: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA) • for short-circuit protection of the auxiliary switch required 9G: 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 • side-by-side mounting height width 45 mm depth 107 mm	•	10 ha
- at 460/480 V rated value 20 hp - at 575/600 V rated value 25 hp contact rating of auxiliary contacts according to UL A600 / Q600 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: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A (415V,80kA) • with type of assignment 2 required gG: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (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 forward and backward by +/- 22.5° on vertical mounting surface fastening method • side-by-side mounting height 102 mm width 45 mm depth 107 mm		
- at 575/600 V rated value contact rating of auxiliary contacts according to UL A600 / Q600 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 GS: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A (415V,80kA) GS: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA) GS: 10 A (500 V, 1 kA) Installation/ mounting/ dimensions mounting position		·
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 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 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 • side-by-side mounting • side-by-side mounting #/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface #/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface #/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface #/-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; and be tilted forward and backward by +/- 22.5° on vertical mounting surface; and be tilted forward and backward by +/- 22.5° on vertical mounting surface; and be tilted forward and backward by +/- 22.5° on vertical mounting surface; and be tilted forward and backward by +/- 22.5° on vertical mounting surface; and be tilted forward and backward by +/- 22.5° on vertical mounting surface; and be tilted forward and backward by +/- 22.5° on vertical mounting surface; and be tilted forward and backward by +/- 22.5° on vertical mounting surface; and be tilted forward and backward by +/- 22.5° on vertical mounting surface; and be tilted forward and backward by +/- 22.5° on vertical mounting surface;		·
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 9G: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A (415V,80kA) — with type of assignment 2 required 9G: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA) 9G: 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 9 side-by-side mounting 9 Yes height 102 mm 45 mm depth 107 mm		
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 gG: 50A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A (415V,80kA) gG: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (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 screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 • side-by-side mounting yes height included the fuse link 102 mm width 45 mm depth		
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 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 • side-by-side mounting • side-by-side mounting height 102 mm depth 107 mm		No
 for short-circuit protection of the main circuit — with type of coordination 1 required — with type of assignment 2 required — with type of assignment 2 required — for short-circuit protection of the auxiliary switch required — gG: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA) — for short-circuit protection of the auxiliary switch required — gG: 10 A (500 V, 1 kA) — with type of assignment 2 required — with type of assignment 2 required — gG: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA) — gG: 10 A (500 V, 1 kA) — with type of assignment 2 required — gG: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA) — gG: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA) — gG: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA) — gG: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 125A (415V,80kA) — with type of assignment 2 required — with type of assignment 2 required		
— with type of coordination 1 required — with type of assignment 2 required — of reshort-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions width Gepth General State	-	
— with type of assignment 2 required for short-circuit protection of the auxiliary switch required for short-circuit protection of the auxiliary switch required gG: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (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 screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes height 102 mm width 45 mm depth 107 mm	·	gG: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A (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 forward and backward by +/- 22.5° on vertical mounting surface fastening method side-by-side mounting Yes height width 45 mm depth 107 mm 	**	
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		
backward by +/- 22.5° on vertical mounting surface fastening method		
fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 ◆ side-by-side mounting Yes height 102 mm width 45 mm depth 107 mm	mounting position	
● side-by-side mounting height 102 mm width 45 mm depth 107 mm	fastening method	
height 102 mm width 45 mm depth 107 mm	_	
width 45 mm depth 107 mm		102 mm
		45 mm
	depth	107 mm
	·	

 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	spring-loaded terminals	
for auxiliary and control circuit	spring-loaded terminals	
at contactor for auxiliary contacts	Spring-type terminals	
of magnet coil	Spring-type terminals	
type of connectable conductor cross-sections for main contacts		
• solid	2x (1 10 mm²)	
 solid or stranded 	2x (1 10 mm²)	
 finely stranded with core end processing 	2x (1 6 mm²)	
finely stranded without core end processing	2x (1 6 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 8	
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	450 000	
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		

General Product Approva



Confirmation





<u>KC</u>





Type Examination Certificate





Special Test Certific-<u>ate</u>

Type Test Certificates/Test Report

Marine / Shipping













Marine / Shipping

other

Railway



Confirmation



Special Test Certific-<u>ate</u>

Vibration and Shock

Type Test Certificates/Test Report

Dangerous Good

Transport Information

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=3RT2027-2XF40-0LA2

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2027-2XF40-0LA2

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-2XF40-0LA

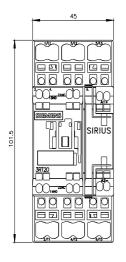
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

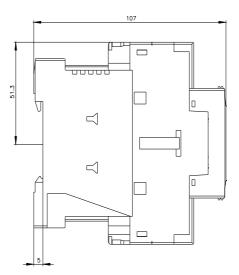
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2027-2XF40-0LA2&lang=en

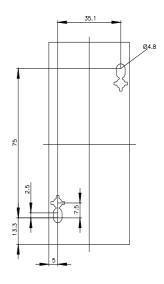
Characteristic: Tripping characteristics, I2t, Let-through current

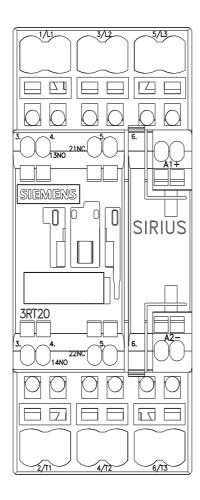
https://support.industry.siemens.com/cs/ww/en/ps/3RT20

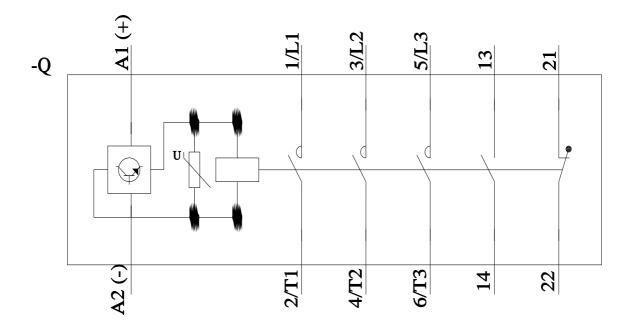
Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2027-2XF40-0LA2&objecttype=14&gridview=view1











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