SIEMENS

Data sheet 3RT2025-1BG40



power contactor, AC-3e/AC-3, 17 A, 7.5 kW / 400 V, 3-pole, 125 V DC, auxiliary contacts: 1 NO + 1 NC, screw terminal, size: S0 $\,$

product designation 98TZ General technical data size of contactor \$0 product extension	product brand name	SIRIUS		
product type designation General technical data Size of contactor Size of contactor **Unuclion module for communication **unucliany switch **Pes **power loss [W] for rated value of the current **at AC in hot operating state per pole **without load current share typical 5.9 W **Insulation voitage **of main circuit with degree of pollution 3 rated value **of auxiliany circuit with degree of pollution 3 rated value **of auxiliany circuit with degree of pollution 3 rated value **of auxiliany circuit with degree of pollution 3 rated value **of auxiliany circuit with degree of pollution 3 rated value **of auxiliany circuit with degree of pollution 4 rated value **of auxiliany circuit rated value **at DC **at DC **10g / 5 ms, 7,5g / 10 ms ** shock resistance with sine pulse **at DC **of contactor with added electronically optimized **at DC **of contactor with added electronically optimized **at DC **of contactor with added auxiliany switch block typical **of the contactor with added auxiliany switch block typical **of the contactor with added auxiliany switch block typical **of the contactor with added auxiliany switch block typical **of the contactor with added auxiliany switch block typical **of the contactor with added auxiliany switch block typical **of the contactor with added auxiliany switch block typical **of the contac	•			
Size of contactor Foreign Sylf for rated value of the current auxiliary switch at AC in hot operating state at AC in hot operating state per pole without load current share typical of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary switch block typical at DC mechanical service life (operating cycles) of contactor typical of the contactor with added auxiliary switch block typical of the contactor with added a				
product extension • function module for communication • auxilliary switch power loss [W] for rated value of the current • at AC in hot operating state • at AC in hot operating state per pole • without load current share typical • of main circuit with degree of poliution 3 rated value • of auxilliary circuit with degree of poliution 3 rated value • of auxillary circuit with degree of poliution 3 rated value • of main circuit rated value • of auxillary circuit vith degree of poliution 3 rated value • of auxillary circuit vith degree of poliution 3 rated value • of auxillary circuit vith degree of poliution 3 rated value • of auxillary circuit vith degree of poliution 3 rated value • of auxillary circuit vith degree of poliution 3 rated value • of main circuit rated value • of auxillary circuit vated value • of the contactor with sine pulse • at DC • 15g / 5 ms, 7.5g / 10 ms mechanical service life (operating cycles) • of contactor with added electronically optimized auxillary switch block typical • of the contactor with added electronically optimized auxillary switch block typical • of the contactor with added auxillary switch block typical • of the contactor with added auxillary switch block typical • of the contactor with added auxillary switch block typical • of the contactor with added auxillary switch block typical • of the contactor with added auxillary switch block typical • of the contactor with added auxillary switch block typical • of the contactor with added auxillary switch block typical • of the contactor with added auxillary switch block typical • of the contactor with added auxillary switch block typical • of the contactor with added auxillary switch block typical • of the contactor with added auxillary switch block typical • of the contactor with added a	General technical data			
• function module for communication • auxiliary switch • auxiliary switch • at AC in hot operating state • at AC in hot operating state per pole • at AC in hot operating state per pole • at AC in main circuit with degree of pollution 3 rated value • of main circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit with degree of pollution 3 rated value • of auxiliary circuit rated value • at DC • at	size of contactor	SO		
• auxillary switch • at AC in hot operating state per pole • at AC in hot operating state per pole • without load current share typical • of main circuit with degree of pollution 3 rated value • of main circuit with degree of pollution 3 rated value • of auxillary circuit with degree of pollution 3 rated value • of main circuit with degree of pollution 3 rated value • of main circuit with degree of pollution 3 rated value • of main circuit rated value • of auxiliary circuit rated value • at DC 10g / 5 ms, 7,5g / 10 ms **Another cestance at rectangular impulse • at DC 10g / 5 ms, 7,5g / 10 ms **Another contactor with sine pulse • at DC 15g / 5 ms, 10g / 10 ms **To contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch b	product extension			
power loss [W] for rated value of the current at AC in hot operating state	• function module for communication	No		
at AC in hot operating state at AC in hot operating state per pole without load current share typical without load current share typical of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of main circuit rated value of auxiliary circuit rated value of the contactoring to EN 60947-1 shock resistance at rectangular impulse of at DC of contactor With sine pulse of the Contactor with sine pulse of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxil	auxiliary switch			
at AC in hot operating state per pole without load current share typical without load current share typical solution voltage of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit rated value of auxiliary satich since protective separation between of auxiliary satich block typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block	power loss [W] for rated value of the current			
insulation voltage of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value of auxiliary circuit rated value of main circuit rated value of auxiliary circuit rated value of with maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse of the CD 10g / 5 ms, 7,5g / 10 ms shock resistance with sine pulse of the contactor with sine pulse of the contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typic	 at AC in hot operating state 	1.8 W		
insulation voltage of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value 690 V surge voltage resistance of main circuit rated value 680 V of auxiliary circuit rated value 6 kV naximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse of at DC 10g / 5 ms, 7,5g / 10 ms shock resistance with sine pulse of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to EC 81346-2 Qu Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature of during storage during storage elative humidity minimum 10 % relative humidity minimum Main circuit Main circuit 690 V 69	 at AC in hot operating state per pole 	0.6 W		
of main circuit with degree of pollution 3 rated value of auxiliary circuit with degree of pollution 3 rated value surge voltage resistance of main circuit rated value of auxiliary circuit rated value of kV maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse ot at DC 10g / 5 ms, 7,5g / 10 ms shock resistance with sine pulse of contactor life (operating cycles) of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical	without load current share typical	5.9 W		
of auxiliary circuit with degree of pollution 3 rated value surge voltage resistance of main circuit rated value of of auxiliary circuit rated value a for of auxiliary circuit rated value of over auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of over auxiliary circuit rated value of auxiliary circuit rated value of over auxiliary circuit rated value of over auxiliary circuit rated value of auxiliary circuit rated value of over contactor with sine pulse of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 10/01/2009 Ambient conditions installation altitude at height above sea level maximum 2000 m ambient temperature of during operation of uring operation of uring storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit	insulation voltage			
surge voltage resistance of main circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of avxiliary circuit rated value of kV maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse o at DC 10g / 5 ms, 7,5g / 10 ms shock resistance with sine pulse o at DC 15g / 5 ms, 10g / 10 ms mechanical service life (operating cycles) of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor wi	• of main circuit with degree of pollution 3 rated value	690 V		
of main circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of auxiliary circuit rated value of kV maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse oat DC 10g / 5 ms, 7,5g / 10 ms shock resistance with sine pulse oat DC 15g / 5 ms, 10g / 10 ms mechanical service life (operating cycles) of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added electronically optimized of the contactor wi	 of auxiliary circuit with degree of pollution 3 rated value 	690 V		
of auxiliary circuit rated value maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 shock resistance at rectangular impulse	surge voltage resistance			
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1 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 • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with a	of main circuit rated value	6 kV		
shock resistance at rectangular impulse • at DC shock resistance with sine pulse • at DC 15g / 5 ms, 10g / 10 ms mechanical service life (operating cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of t	 of auxiliary circuit rated value 	6 kV		
at DC shock resistance with sine pulse at DC 15g / 5 ms, 10g / 10 ms mechanical service life (operating cycles) of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation of during storage relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit		400 V		
shock resistance with sine pulse	shock resistance at rectangular impulse			
at DC mechanical service life (operating cycles) of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature oduring operation oduring storage -25 +60 °C relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit 10 000 000 10 000 000 10 000 000 10 000 00	• at DC	10g / 5 ms, 7,5g / 10 ms		
mechanical service life (operating cycles) • of contactor typical • of the contactor with added electronically optimized auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical • of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage -55 +80 °C relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit	shock resistance with sine pulse			
of contactor typical of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical 10 000 000 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature oduring operation -25 +60 °C oduring storage relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit 10 000 000 10 000 000 10 000 000 10 000 00	• at DC	15g / 5 ms, 10g / 10 ms		
of the contactor with added electronically optimized auxiliary switch block typical of the contactor with added auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature oduring operation oduring storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum multiput 10 000 000 Q 2000 m 200	mechanical service life (operating cycles)			
auxiliary switch block typical of the contactor with added auxiliary switch block typical reference code according to IEC 81346-2 Q Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit 10 000 000 10	 of contactor typical 	10 000 000		
reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit		5 000 000		
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit	 of the contactor with added auxiliary switch block typical 	10 000 000		
installation altitude at height above sea level maximum ambient temperature during operation during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit 2 000 m -25 +60 °C -25 +80 °C 10 % 95 %	reference code according to IEC 81346-2	Q		
installation altitude at height above sea level maximum ambient temperature • during operation • during storage relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit	Substance Prohibitance (Date)	10/01/2009		
ambient temperature • during operation • during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit	Ambient conditions			
 during operation during storage -55 +80 °C relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit 	installation altitude at height above sea level maximum	2 000 m		
• during storage relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit	ambient temperature			
relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 95 % maximum Main circuit	 during operation 	-25 +60 °C		
relative humidity at 55 °C according to IEC 60068-2-30 95 % maximum Main circuit	during storage	-55 +80 °C		
maximum Main circuit	relative humidity minimum	10 %		
		95 %		
number of poles for main current circuit 3	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 value	40 A
 at AC-1 — up to 690 V at ambient temperature 40 °C rated value 	40 A
— up to 690 V at ambient temperature 60 °C rated value	35 A
• at AC-3	
— at 400 V rated value	17 A
— at 500 V rated value	17 A
— at 690 V rated value	13 A
• at AC-3e	
— at 400 V rated value	17 A
— at 500 V rated value	17 A
— at 690 V rated value	13 A
at AC-4 at 400 V rated value	15.5 A
• at AC-5a up to 690 V rated value	35.2 A
at AC-5b up to 400 V rated value	14.1 A
• at AC-6a	IT. I A
— up to 230 V for current peak value n=20 rated value	11.4 A
	11.4 A
— up to 400 V for current peak value n=20 rated value	
— up to 500 V for current peak value n=20 rated value	11.4 A
— up to 690 V for current peak value n=20 rated value	11.3 A
• at AC-6a	
— up to 230 V for current peak value n=30 rated value	7.6 A
— up to 400 V for current peak value n=30 rated value	7.6 A
 up to 500 V for current peak value n=30 rated value 	7.6 A
— up to 690 V for current peak value n=30 rated value	7.6 A
minimum cross-section in main circuit at maximum AC-1 rated value	10 mm ²
operational current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	7.7 A
• at 690 V rated value	7.7 A
operational current	
at 1 current path at DC-1	
— at 24 V rated value	35 A
— at 60 V rated value	20 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 60 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	0.07.
— at 24 V rated value	35 A
— at 24 v rated value — at 60 V rated value	35 A
	35 A
— at 110 V rated value	
— 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 60 V rated value	5 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 60 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 60 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	7.5 kW			
• at AC-3				
— at 230 V rated value	4 kW			
— at 400 V rated value	7.5 kW			
— at 500 V rated value	7.5 kW			
— at 690 V rated value	11 kW			
• at AC-3e				
— at 230 V rated value	4 kW			
— at 400 V rated value	4.5 kW			
— at 500 V rated value	7.5 kW			
— at 690 V rated value	1.5 kW			
operating power for approx. 200000 operating cycles at AC-				
4				
• at 400 V rated value	3.5 kW			
at 690 V rated value	6 kW			
operating apparent power at AC-6a				
• up to 230 V for current peak value n=20 rated value	4.5 kVA			
• up to 400 V for current peak value n=20 rated value	7.8 kVA			
• up to 500 V for current peak value n=20 rated value	9.9 kVA			
 up to 690 V for current peak value n=20 rated value 	13.6 kVA			
operating apparent power at AC-6a				
up to 230 V for current peak value n=30 rated value	3 kVA			
• up to 400 V for current peak value n=30 rated value	5.2 kVA			
• up to 500 V for current peak value n=30 rated value	6.6 kVA			
• up to 690 V for current peak value n=30 rated value	9.1 kVA			
short-time withstand current in cold operating state up to				
40 °C				
 limited to 1 s switching at zero current maximum 	225 A; Use minimum cross-section acc. to AC-1 rated value			
 limited to 5 s switching at zero current maximum 	225 A; Use minimum cross-section acc. to AC-1 rated value			
 limited to 10 s switching at zero current maximum 	189 A; Use minimum cross-section acc. to AC-1 rated value			
 limited to 30 s switching at zero current maximum 	140 A; Use minimum cross-section acc. to AC-1 rated value			
• limited to 60 s switching at zero current maximum	115 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	1 000 1/h			
• at AC-2 maximum	1 000 1/h			
• at AC-3 maximum	1 000 1/h			
• at AC-3e maximum	1 000 1/h			
• at AC-4 maximum	300 1/h			

Control circuit/ Control	
type of voltage of the control supply voltage	DC
control supply voltage at DC	
• rated value	125 V
operating range factor control supply voltage rated value of	
magnet coil at DC	
• initial value	0.8
full-scale value	1.1
closing power of magnet coil at DC	5.9 W
holding power of magnet coil at DC	5.9 W
closing delay	
• at DC	50 170 ms
opening delay	45 40
• at DC	15 18 ms
arcing time	10 10 ms
control version of the switch operating mechanism Auxiliary circuit	Standard A1 - A2
number of NC contacts for auxiliary contacts instantaneous	1
contact	
number of NO contacts for auxiliary contacts instantaneous contact	1
operational current at AC-12 maximum	10 A
operational current at AC-15	
at 230 V rated value	10 A
at 400 V rated value	3 A
at 500 V rated value at 600 V rated value	2 A
at 690 V rated value	1A
operational current at DC-12	40.4
 at 24 V rated value at 48 V rated value 	10 A 6 A
at 46 V rated value at 60 V rated value	6 A
at 100 V rated value at 110 V rated value	3 A
at 175 V rated value at 125 V rated value	2 A
at 220 V rated value	1A
at 600 V rated value	0.15 A
operational current at DC-13	0.10 A
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	14 A
at 600 V rated value	17 A
yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V rated value	1 hp
— at 230 V rated value	3 hp
• for 3-phase AC motor	
— at 200/208 V rated value	3 hp
— at 220/230 V rated value	5 hp
— at 460/480 V rated value	10 hp
— at 575/600 V rated value	15 hp
contact rating of auxiliary contacts according to UL	A600 / P600
Short-circuit protection	
design of the fuse link	
for short-circuit protection of the main circuit	

 — with type of coordination 1 required 	gG: 63A (690V,100kA), aM: 32A (690V,100kA), BS88: 63A (415V,80kA)		
— with type of assignment 2 required	gG: 25A (690V,100kA), aM: 20A (690V,100kA), BS88: 25A (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	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715		
side-by-side mounting	Yes		
height	85 mm		
width	45 mm		
depth	107 mm		
required spacing			
with side-by-side mounting			
— forwards	10 mm		
— upwards	10 mm		
— downwards	10 mm		
— at the side	0 mm		
for grounded parts— forwards	10 mm		
— iorwards — upwards	10 mm		
— upwards — at the side	6 mm		
— downwards	10 mm		
• for live parts			
— forwards	10 mm		
— upwards	10 mm		
— downwards	10 mm		
— at the side	6 mm		
Connections/ Terminals			
type of electrical connection			
for main current circuit	screw-type terminals		
for auxiliary and control circuit	screw-type terminals		
at contactor for auxiliary contacts	Screw-type terminals		
• of magnet coil	Screw-type terminals		
type of connectable conductor cross-sections for main contacts			
• solid	2x (1 2.5 mm²), 2x (2.5 10 mm²)		
 solid or stranded 	2x (1 2.5 mm²), 2x (2.5 10 mm²)		
 finely stranded with core end processing 	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²		
connectable conductor cross-section for main contacts			
• solid	1 10 mm²		
• stranded	1 10 mm²		
finely stranded with core end processing	1 10 mm²		
connectable conductor cross-section for auxiliary contacts			
solid or stranded	0.5 2.5 mm²		
finely stranded with core end processing	0.5 2.5 mm²		
type of connectable conductor cross-sections			
for auxiliary contacts			
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 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)		
AWG number as coded connectable conductor cross section			
• for main contacts	16 8		
for auxiliary contacts	20 14		
Safety related data			
product function			
mirror contact according to IEC 60947-4-1	Yes		
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 %		
	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		
suitability for use			
 safety-related switching OFF 	Yes		
0-45-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4			

Certificates/ approvals

General Product Approval



Confirmation





<u>KC</u>





Type Examination Certificate





Type Test Certificates/Test Report

Special Test Certificate

Marine / Shipping













other	Railway	Dangerous Good	Environment
-------	---------	----------------	-------------

Confirmation



Vibration and Shock

Transport Information

Environmental Confirmations

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=3RT2025-1BG40

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2025-1BG40

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2025-1BG40

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

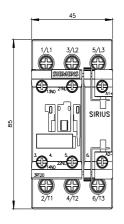
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT2025-1BG40&lang=en

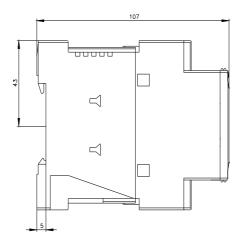
Characteristic: Tripping characteristics, I²t, Let-through current

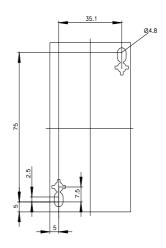
https://support.industry.siemens.com/cs/ww/en/ps/3RT2025-1BG40/cha

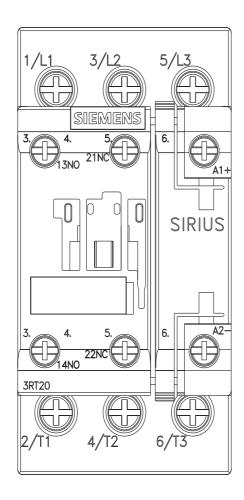
Further characteristics (e.g. electrical endurance, switching frequency)

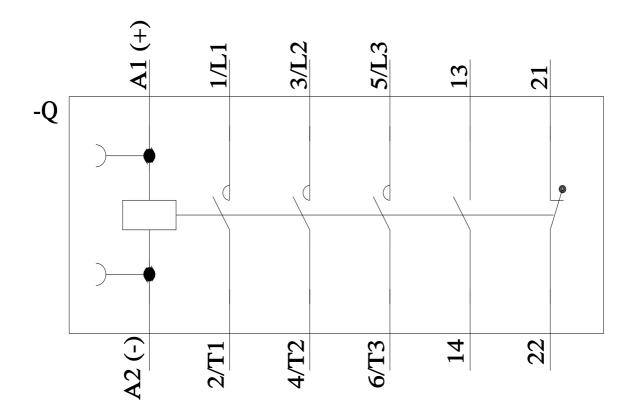
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2025-1BG40&objecttype=14&gridview=view1











last modified: 2/10/2023 🖸