## **SIEMENS**

Data sheet 3RT2027-1AH00



power contactor, AC-3e/AC-3, 32 A, 15 kW / 400 V, 3-pole, 48 V AC, 50 Hz, auxiliary contacts: 1 NO + 1 NC, screw terminal, size: S0

product designation 9round type designation 9round 19round 19r	product brand name	SIRIUS
product type designation 3RT2  General technical data  Size of contactor Size of contactor  **unction module for communication No Auction Module for action Module for communication No Auction Module for action Module for communication No Auction Module for action Module No Auction		
Size of contactor  Froduct extension  • function module for communication • 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 value • of auxiliary switch • of one contactor with added electronically optimized • at AC • of contactor typical • of the contactor with added auxiliary switch block typical • of the contactor with ad	. •	3RT2
product extension  • function module for communication • auxilliary switch  power loss [W] for rated value of the current • at AC in hot operating state   5.3 W   • at AC in hot operating state per pole   2.3 W   • without load current share typical   9,8 W    Insulation voltage • of main circuit with degree of pollution 3 rated value   680 V   • of auxiliary circuit with degree of pollution 3 rated value   680 V   • of main circuit rated value   6 kV   • of auxiliary circuit with degree of pollution 3 rated value   6 kV   • of auxiliary circuit value   6 kV   • of auxiliary switch biock value   6 kV   • of auxiliary switch sine pulse • of at AC   13,5g / 5 ms, 8,3g / 10 ms  mechanical service life (operating cycles) • of ontactor with added electronically optimized auxiliary switch block typical   10 000 000   • of the contactor with added auxiliary switch block typical   10 000 000   • of the contactor with added auxiliary switch block typical   10 000 000   • of the contactor with added auxiliary switch block typical   10 000 000   • of the contactor with added auxiliary switch block typical   10 000 000   • of the contactor with added auxiliary switch block typical   10 000 000   • of the contactor with added auxiliary switch block typical   10 000 000   • of the contactor with added auxiliary switch block typical   10 000 000   • of the contactor with added auxiliary switch block typical   10 000 000   • of the contactor with added auxiliary switch block typical   10 000 000   • of the contactor with added auxiliary switc	General technical data	
• function module for communication • auxiliary switch  ves  power loss [W] for rated value of the current • 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 vated value • of auxiliary circuit rated value • at AC	size of contactor	SO
• auxiliary switch  power loss [W] for rated value of the current  • 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 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 AC  8.3g / 5 ms, 5,3g / 10 ms  shock resistance at rectangular impulse • at AC  13.5g / 5 ms, 8,3g / 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 w	product extension	
power loss [W] for rated value of the current  at AC in hot operating state 6.3 W at AC in hot operating state per pole 2.3 W ewithout load current share typical 9.8 W  Insulation voltage of main circuit with degree of pollution 3 rated value 690 V surge voltage resistance of main circuit rated value 6kV anaximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1  shock resistance at rectangular impulse at AC 13,5 f sms, 8,3g / 10 ms  shock resistance with sine pulse of on tactor typical 10000000  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 auxiliary switch block typical 1000/100000000000000000000000000000000	• function module for communication	No
at AC in hot operating state e prole 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 rated value of main circuit rated value of main circuit rated value of auxiliary circuit rated value of at AC of auxiliary circuit rated value of auxiliary since auxiliary in the pulse of the contactor with sine pulse 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 auxiliary switch block typical of	auxiliary switch	Yes
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 main circuit rated value of auxiliary circuit rated value of at AC asago for special specia	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 with degree of pollution 3 rated value of main circuit rated value of main circuit rated value of main circuit rated value of auxiliary circuit rated value of at AC of auxiliary circuit rated value of the contactor 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 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 with added electronically optimized auxiliary switch block typical of the contactor with added electronic	<ul> <li>at AC in hot operating state</li> </ul>	6.3 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 ot AC 8,3g / 5 ms, 5,3g / 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 Q Substance Prohibitance (Date)  Armbient conditions installation altitude at height above sea level maximum abient temperature of during storage of a during storage elative humidity minimum 10 %  relative humidity minimum 10 Main circuit  Main circuit  Main circuit  690 V  690 V  690 V  690 V  68V  400 V  601 V  600 V	<ul> <li>at AC in hot operating state per pole</li> </ul>	2.3 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 AC	<ul> <li>without load current share typical</li> </ul>	9.8 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     of auxiliary circuit rated value     of of auxiliary circuit rated value     of of auxiliary circuit rated value  aximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1  shock resistance at rectangular impulse     of at AC	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 kV  maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1  shock resistance at rectangular impulse  oat AC  shock resistance with sine pulse  oat AC  shock resistance with sine pulse  oat AC  shock resistance with sine pulse  oat AC  13,5g / 5 ms, 8,3g / 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 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 with added electronically optimized  auxiliary switch block typical  odo 0000000000000000000000000000000000	<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	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 AC     s,3g / 5 ms, 5,3g / 10 ms  shock resistance with sine pulse     oat AC     13,5g / 5 ms, 8,3g / 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 contact	<ul> <li>of auxiliary circuit with degree of pollution 3 rated value</li> </ul>	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 AC  • at AC  • at AC  • at AC  • of contactor with sine pulse  • of contactor typical  • of the contactor with added electronically optimized auxiliary switch block typical  • of the contactor with added auxiliary sw	of main circuit rated value	6 kV
shock resistance at rectangular impulse  • at AC  shock resistance with sine pulse  • at AC  13,5g / 5 ms, 8,3g / 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	of auxiliary circuit rated value	6 kV
at AC  shock resistance with sine pulse  at AC  at		400 V
shock resistance with sine pulse	shock resistance at rectangular impulse	
at AC  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  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 the contactor with added auxiliary switch block typical  10 000 000  10 000  10 000  10 000 000	• at AC	8,3g / 5 ms, 5,3g / 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  2 000 m  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     oduring storage     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 AC	13,5g / 5 ms, 8,3g / 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  Main circuit  5 000 000  10 000  0 000  Q  2 000 m  3 000 m  4 000 m  5 000 000  9 000 000  0 000 000  0 000 00	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 0	<ul> <li>of contactor typical</li> </ul>	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  10 %  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit	<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	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  -25 +60 °C  • during storage  -55 +80 °C  relative humidity minimum  10 %  relative humidity at 55 °C according to IEC 60068-2-30 maximum  Main circuit	Ambient conditions	
<ul> <li>during operation</li> <li>during storage</li> <li>telative humidity minimum</li> <li>maximum</li> <li>10 %</li> <li>10 %<td>installation altitude at height above sea level maximum</td><td>2 000 m</td></li></ul>	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	
<ul> <li>at AC-1 at 400 V at ambient temperature 40 °C rated</li> </ul>	50 A
value	
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated	50 A
value	40 A
<ul> <li>up to 690 V at ambient temperature 60 °C rated value</li> </ul>	42 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
	21 A
<ul><li>— at 690 V rated value</li><li>● at AC-4 at 400 V rated value</li></ul>	22 A
	44 A
at AC-5a up to 690 V rated value	
at AC-5b up to 400 V rated value	26.5 A
• at AC-6a	00.0 A
— up to 230 V for current peak value n=20 rated value	30.8 A
— up to 400 V for current peak value n=20 rated value	30.8 A
— up to 500 V for current peak value n=20 rated value	27 A
— up to 690 V for current peak value n=20 rated value	21 A
• at AC-6a	
<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	20.5 A
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	20.5 A
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	18 A
<ul> <li>up to 690 V for current peak value n=30 rated value</li> </ul>	18 A
minimum cross-section in main circuit at maximum AC-1 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	
— 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	1A
— 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	1A
— at 600 V rated value	0.8 A
with 3 current paths in series at DC-1  at 24 V rated value.	25 A
— 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	35 A
— at 440 V rated value	2.9 A
— at 600 V rated value	1.4 A
<ul> <li>at 1 current path at DC-3 at DC-5</li> </ul>	

at 24 V rated value	20.4		
— at 24 V rated value	20 A		
— at 60 V rated value	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		
<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul>			
— 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	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			
<ul> <li>at 400 V rated value</li> </ul>	6 kW		
at 690 V rated value	10.3 kW		
operating apparent power at AC-6a			
<ul> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	12.2 kVA		
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	21.3 kVA		
<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	23.3 kVA		
<ul> <li>up to 690 V for current peak value n=20 rated value</li> </ul>	25 kVA		
operating apparent power at AC-6a			
• up to 230 V for current peak value n=30 rated value	8.1 kVA		
• up to 400 V for current peak value n=30 rated value	14.2 kVA		
• up to 500 V for current peak value n=30 rated value	15.5 kVA		
• up to 690 V for current peak value n=30 rated value	21.5 kVA		
short-time withstand current in cold operating state up to			
40 °C			
<ul> <li>limited to 1 s switching at zero current maximum</li> </ul>	499 A; Use minimum cross-section acc. to AC-1 rated value		
<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	341 A; Use minimum cross-section acc. to AC-1 rated value		
<ul> <li>limited to 10 s switching at zero current maximum</li> </ul>	260 A; Use minimum cross-section acc. to AC-1 rated value		
<ul> <li>limited to 30 s switching at zero current maximum</li> </ul>	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 AC	5 000 1/h		
operating frequency			
• at AC-1 maximum	1 000 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-4 maximum	250 1/h		
Control circuit/ Control			

type of voltage of the control supply voltage	AC
control supply voltage at AC	7.0
at 50 Hz rated value	48 V
operating range factor control supply voltage rated value of magnet coil at AC	40 V
• at 50 Hz	0.8 1.1
apparent pick-up power of magnet coil at AC	
• at 50 Hz	77 VA
inductive power factor with closing power of the coil	
● at 50 Hz	0.82
apparent holding power of magnet coil at AC	
● at 50 Hz	9.8 VA
inductive power factor with the holding power of the coil	
● at 50 Hz	0.25
closing delay	
• at AC	8 40 ms
opening delay	
• at AC	4 16 ms
arcing time	10 10 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous contact	1
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	2 A
at 690 V rated value	1 A
operational current at DC-12	40.4
at 24 V rated value	10 A
at 48 V rated value     at 60 V rated value	6 A 6 A
<ul> <li>at 60 V rated value</li> <li>at 110 V rated value</li> </ul>	3 A
• 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	0.107
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	27 A
at 600 V rated value	27 A
yielded mechanical performance [hp]	
<ul> <li>for single-phase AC motor</li> </ul>	
— 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	10 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 / P600	
Short-circuit protection		
design of the fuse link		
<ul> <li>for short-circuit protection of the main circuit</li> </ul>		
<ul> <li>— with type of coordination 1 required</li> </ul>	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)	
nstallation/ 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	97 mm	
required spacing		
with side-by-side mounting		
— forwards	10 mm	
— upwards	10 mm	
— downwards	10 mm	
— at the side	0 mm	
for grounded parts		
— forwards	10 mm	
— upwards	10 mm	
— at the side	6 mm	
— downwards	10 mm	
for live parts		
— forwards	10 mm	
— upwards	10 mm	
— downwards	10 mm	
— at the side	6 mm	
Connections/ Terminals		
type of electrical connection		
for main current circuit	screw-type terminals	
for auxiliary and control circuit	screw-type terminals	
at contactor for auxiliary contacts	Screw-type terminals	
of magnet coil	Screw-type terminals	
type of connectable conductor cross-sections for main contacts	oolow type terrimais	
solid	2x (1 2.5 mm²), 2x (2.5 10 mm²)	
solid or stranded	2x (1 2.5 mm²), 2x (2.5 10 mm²)	
	2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²	
finely stranded with core end processing     connectable conductor cross-section for main contacts	2A (1 2.3 HIIII ), 2A (2.3 0 HIIII ), 1A 10 HIIII	
solid     solid	1 10 mm²	
	1 10 mm²	
stranded     finely stranded with core and processing		
finely stranded with core end processing	1 10 mm²	
connectable conductor cross-section for auxiliary contacts	0.5	
solid or stranded     finely stranded with page and proceeding.	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	0.45.45.30.0.4075.05.33	
— 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  AWG number as coded connectable conductor cross	2x (20 16), 2x (18 14)	
section	16 9	
section  ● for main contacts	16 8	
section  ● for main contacts  ● for auxiliary contacts	16 8 20 14	
• for main contacts     • for auxiliary contacts Safety related data		
section	20 14	
section  • for main contacts  • for auxiliary contacts  Safety related data		

proportion of dangerous failures	
<ul> <li>with low demand rate according to SN 31920</li> </ul>	40 %
<ul> <li>with high demand rate according to SN 31920</li> </ul>	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
suitability for use	
<ul> <li>safety-related switching OFF</li> </ul>	Yes
suitability for use	

Certificates/ approvals

## **General Product Approval**





Confirmation



<u>KC</u>



EMC	Functional Safety/Safety of Ma- chinery	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



Confirmation

Vibration and Shock

**Environmental Con**firmations

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=3RT2027-1AH00

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT2027-1AH00}$ 

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-1AH00

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

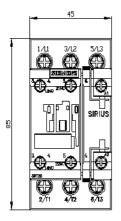
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2027-1AH00&lang=en

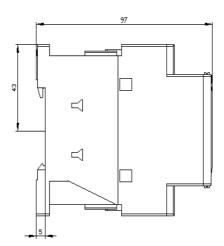
Characteristic: Tripping characteristics, I2t, Let-through current

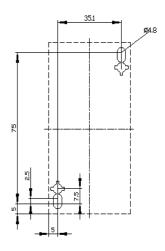
https://support.industry.siemens.com/cs/ww/en/ps/3RT2027-1AH00/char

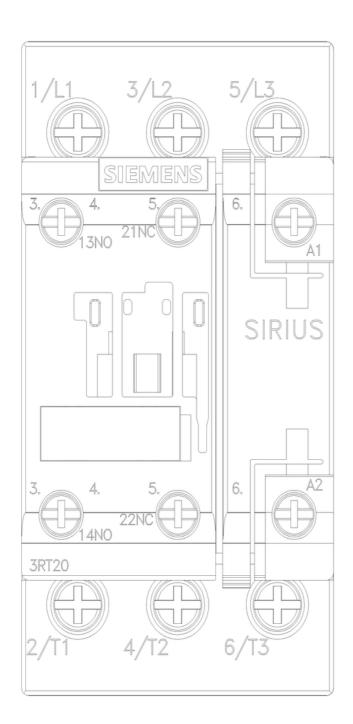
Further characteristics (e.g. electrical endurance, switching frequency)

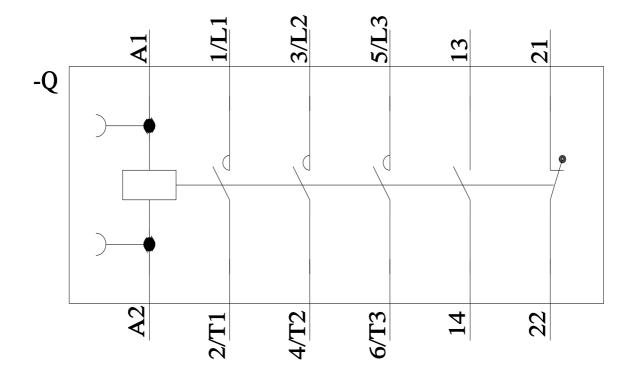
3RT2027-1AH00&objecttype=14&gridview=view1 http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb











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