## SIEMENS

## Data sheet

## 3RT2028-2BF40



power contactor, AC-3e/AC-3, 38 A, 18.5 kW / 400 V, 3-pole, 110 V DC, auxiliary contacts: 1 NO + 1 NC, spring-loaded terminal, size: S0

product brand name         SiRIUS           product designation         Power contactor           product type designation         SR12           Ceneral technical data         Sufficient Ceneral C		
product type designation         3RT2           General technical data	product brand name	SIRIUS
General technical data     S0       size of contactor     S0       product extension     No       • function module for communication     No       • auxiliary switch     Yes       power loss [W] for rated value of the current     9.6 W       • at AC in hot operating state     9.6 W       • at AC in hot operating state     9.6 W       • at AC in hot operating state projel     3.2 W       • without load current share typical     690 V       • of main circuit with degree of pollution 3 rated value     690 V       • of main circuit with degree of pollution 3 rated value     690 V       • of main circuit rated value     64 V       • of main circuit rated value     64 V       • of main circuit rated value     64 V       • of auxiliary circuit portective separation between coll and main contacts according to EN 60947-1     400 V       shock resistance with sine pulse     10g / 5 ms, 7,5g / 10 ms       • at DC     10g / 5 ms, 7,5g / 10 ms       mechanical service life (operating cycles)     1000 000       • of the contactor with added auxiliary switch block typical     5000 000       • of the contactor with added auxiliary switch block typical     10000 000       • of the contactor with added auxiliary switch block typical     1000 000       • of the contactor with added auxillary switch block typical     10000 000 </th <th>product designation</th> <th>Power contactor</th>	product designation	Power contactor
size of contactor     S0       product extension     No       • function module for communication     No       • auxiliary switch     Yes       power loss [W] for rated value of the current     9.6 W       • at AC in hot operating state     9.6 W       • at AC in hot operating state per pole     3.2 W       • without load current share typical     5.9 W       Insulation voltage     690 V       • of main circuit with degree of pollution 3 rated value     690 V       • of main circuit with degree of pollution 3 rated value     690 V       • of main circuit rated value     64 V       • of auxiliary circuit rated value     64 V       • of main circuit rated value     64 V       • of auxiliary circuit rated value     64 V       • of auxiliary switch block typical     100 V       • of contactor swith sine pulse     109 / 5 ms, 7,5g / 10 ms       • of contactor vipical     10 000 000       • of the contactor with added electronically optimized     1000 000       • of the contactor with added auxiliary switch block typical     10 000 000       • of the contactor with added auxiliary switch block typical     1000 000       • of the contactor	product type designation	3RT2
product extension       No         • function module for communication       No         • auxiliary switch       Yes         • at AC in hot operating state       9.6 W         • at AC in hot operating state per pole       3.2 W         • without load current share typical       5.9 W         • of main circui with degree of pollution 3 rated value       690 V         • of main circui with degree of pollution 3 rated value       690 V         • of main circui rated value       690 V         • of main circui rated value       64V         • of auxiliary circuit rated value       64V         • of main circuit rated value       64V         • of contactor with sine pulse       10g / 5 ms, 7.5g / 10 ms         • at DC       15g / 5 ms, 10g / 10 ms         mechanical service life (operating cycles)       100 000 000         • of the contactor with added electronically optimized       5000 000         avaviliary switch block typical       000	General technical data	
• function module for communication         No           • auxiliary switch         Yes           power loss [W] for rated value of the current         -           • at AC in hot operating state         9.6 W           • at AC in hot operating state per pole         3.2 W           • without load current share typical         5.9 W           Insulation voltage         690 V           • of main circuit with degree of pollution 3 rated value         690 V           • of main circuit with degree of pollution 3 rated value         690 V           • of main circuit ated value         6 kV           • of main circuit rated value         6 kV           • of auxiliary circuit rated value         100 V           • ot auxiliary circuit rated value         6 kV           • at DC         10g / 5 ms, 7,5g / 10 ms           • at DC         10g / 5 ms, 7,5g / 10 ms           • at DC         10 000 000           • of contactor with adeed auxiliary switch block typical         10 000 000 <th>size of contactor</th> <th>SO</th>	size of contactor	SO
• auxiliary switch         Yes           power loss [W] for rated value of the current	product extension	
power loss [W] for rated value of the current         9.6 W           • at AC in hot operating state per pole         3.2 W           • at AC in hot operating state per pole         3.2 W           • without load current share typical         5.9 W           Insulation voltage         690 V           • of main circuit with degree of pollution 3 rated value         690 V           • of auxiliary circuit with degree of pollution 3 rated value         690 V           • of auxiliary circuit rated value         6 KV           • of auxiliary service life (operating cycles)         1000 V           • at DC         10g / 5 ms, 7.5g / 10 ms           subct resistance with side elauxiliary switch block typical         10 000 000	<ul> <li>function module for communication</li> </ul>	No
• at AC in hot operating state     9.6 W       • at AC in hot operating state per pole     3.2 W       • without load current share typical     5.9 W       Insulation voltage     690 V       • of main circuit with degree of pollution 3 rated value     690 V       • of main circuit with degree of pollution 3 rated value     690 V       • of main circuit with degree of pollution 3 rated value     690 V       • of main circuit with degree of pollution 3 rated value     690 V       • of main circuit with degree of pollution 3 rated value     64V       • of main circuit rated value     6 kV       • of main circuit rated value     6 kV       • of auxiliary circuit rated value     100 V       • at DC     15g / 5 ms, 10g / 10 ms       • at DC     15g / 5 ms, 10g / 10 ms       • of contactor with added electronically optimized auxiliary witch block typical     10 000 000       • of the contactor 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 add	auxiliary switch	Yes
• at AC in hot operating state per pole       3.2 W         • without load current share typical       5.9 W         insulation voltage       60 main circuit with degree of pollution 3 rated value       690 V         • of main circuit with degree of pollution 3 rated value       690 V         surge voltage resistance       690 V         • of main circuit with degree of pollution 3 rated value       690 V         • of main circuit rated value       6 kV         • of main circuit rated value       6 kV         • of main circuit rated value       6 kV         • of auxiliary circuit rated value       6 kV         • of auxiliary circuit rated value       6 kV         maximum permissible voltage for protective separation between coll and main contacts according to EN 60947-1       400 V         • at DC       10g / 5 ms, 7,5g / 10 ms         • at DC       10g / 5 ms, 7,5g / 10 ms         • at DC       10g / 5 ms, 10g / 10 ms         • at DC       10 000 000         • of contactor typical       10 000 000         • of the contactor 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         •	power loss [W] for rated value of the current	
• without load current share typical       5.9 W         Insulation voltage       690 V         • of main circuit with degree of pollution 3 rated value       690 V         surge voltage resistance       690 V         • of main circuit with degree of pollution 3 rated value       680 V         surge voltage resistance       6 kV         • of main circuit rated value       6 kV         • of auxiliary circuit rated value       6 kV         out and main contacts according to EN 60947-1       400 V         shock resistance at rectangular impulse       400 V         • at DC       10g / 5 ms, 7,5g / 10 ms         shock resistance with sine pulse       10g / 5 ms, 7,5g / 10 ms         • at DC       15g / 5 ms, 10g / 10 ms         mechanical service life (operating cycles)       10 000 000         • of the contactor with added electronically optimized auxiliary switch block typical       10 000 000         • of the contactor 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 electronically optimized auxiliary switch block typical       10 000 000         • of the contactor with added electronically optimized auxiliary switch block typical       10 01/2009         Ambient conditions<	<ul> <li>at AC in hot operating state</li> </ul>	9.6 W
Insulation voltage       690 V         • of main circuit with degree of pollution 3 rated value       690 V         • of main circuit with degree of pollution 3 rated value       690 V         surge voltage resistance       61 w         • of main circuit rated value       6 kV         • of main circuit rated value       6 kV         • of auxiliary circuit rated value       6 kV         • of auxiliary circuit rated value       6 kV         maximum permissible voltage for protective separation between coll and main contacts according to EN 60947-1       400 V         shock resistance at rectangular impulse       400 V         • at DC       10g / 5 ms, 7,5g / 10 ms         shock resistance with sine pulse       -         • at DC       10g / 5 ms, 10g / 10 ms         mechanical service life (operating cycles)       -         • of the contactor with added electronically optimized auxiliary switch block typical       10 000 000         • 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 temperature       -         • during operation       -25 +60 °C         • during storage       -55 +80 °C         relative	<ul> <li>at AC in hot operating state per pole</li> </ul>	3.2 W
• 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     690 V       • of main circuit rated value     6 kV       • of auxiliary circuit rated value     6 kV       maximum permissible voltage for protective separation between coli and main contacts according to EN 60947-1     400 V       shock resistance at rectangular impulse     10g / 5 ms, 7,5g / 10 ms       • at DC     10g / 5 ms, 7,5g / 10 ms       shock resistance with sine pulse     15g / 5 ms, 10g / 10 ms       • at DC     100 000       • of contactor 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     00 00 000       installation altitude at height above sea level maximum <th><ul> <li>without load current share typical</li> </ul></th> <th>5.9 W</th>	<ul> <li>without load current share typical</li> </ul>	5.9 W
• of auxiliary circuit with degree of pollution 3 rated value       690 V         surge voltage resistance       6 kV         • of main circuit rated value       6 kV         • of auxiliary circuit rated value       6 kV         • of auxiliary circuit rated value       6 kV         • of auxiliary circuit rated value       6 kV         • ad DC       400 V         • at DC       10g / 5 ms, 7,5g / 10 ms         • at DC       15g / 5 ms, 10g / 10 ms         • at DC       15g / 5 ms, 10g / 10 ms         • at DC       10 000 000         • of contactor typical       10 000 000         • of the contactor 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 set event maximum       2 000 m         ambient conditions       2 000 m         • installation altitude at height above sea level maximum       2 000 m         • during operation       -25 +60 °C	insulation voltage	
surge voltage resistance       6 kV         • 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       10g / 5 ms, 7,5g / 10 ms         shock resistance with sine pulse       10g / 5 ms, 7,5g / 10 ms         shock resistance with sine pulse       10g / 5 ms, 10g / 10 ms         mechanical service life (operating cycles)       10 000 000         • of the contactor 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         reference code according to IEC 81346-2       Q         Substance Prohibitance (Date)       10/01/2009         Ambient conditions       -25 +60 °C         • during operation       -25 +60 °C         • during storage       -55 +80 °C         relative humidity at 55 °C according to IEC 60068-2-30 maximum       95 %	<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	690 V
• of main circuit rated value       6 kV         • of auxiliary circuit rated value       6 kV         • of auxiliary circuit rated value       6 kV         maximum permissible voltage for protective separation between coll and main contacts according to EN 60947-1       400 V         shock resistance at rectangular impulse       10g / 5 ms, 7,5g / 10 ms         • at DC       10g / 5 ms, 7,5g / 10 ms         shock resistance with sine pulse       10g / 5 ms, 10g / 10 ms         • at DC       15g / 5 ms, 10g / 10 ms         mechanical service life (operating cycles)       00000         • of the contactor 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         reference code according to IEC 81346-2       Q         Ambient conditions       2000 m         ambient temperature       -25 +60 °C         • during operation       -25 +60 °C         • during storage       -55 +80 °C         relative humidity at 55 °C according to IEC 60068-2-30       95 %	<ul> <li>of auxiliary circuit with degree of pollution 3 rated value</li> </ul>	690 V
• 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       400 / 5 ms, 7,5g / 10 ms         • 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 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         installation altitude at height above sea level maximum       2 000 m         ambient temperature       -25 +60 °C         • during sporage       -25 +60 °C         • during storage       55 % +80 °C         relative humidity minimum       10 %         95 %       55 %	surge voltage resistance	
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1       400 V         shock resistance at rectangular impulse <ul> <li>at DC</li> <li>tog / 5 ms, 7,5g / 10 ms</li> </ul> shock resistance with sine pulse <ul> <li>at DC</li> <li>tog / 5 ms, 7,5g / 10 ms</li> </ul> mechanical service life (operating cycles) <ul> <li>of contactor typical</li> <li>tog / 5 ms, 10g / 10 ms</li> </ul> of the contactor 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           reference code according to IEC 81346-2         Q           Substance Prohibitance (Date)         10/01/2009           Ambient conditions         2 000 m           installation altitude at height above sea level maximum         2 000 m           ambient temperature <ul> <li>during operation</li> <li>-25 +60 °C</li> <li>etative humidity minimum</li> <li>10 %</li> <li>95 %</li> </ul> Main circuit         Main circuit	<ul> <li>of main circuit rated value</li> </ul>	6 kV
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)       10 000 000         • of contactor typical       10 000 000         • of the contactor 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         reference code according to IEC 81346-2       Q         Substance Prohibitance (Date)       10/01/2009         Ambient conditions       2000 m         ambient temperature       -25 +60 °C         • during operation       -25 +60 °C         • during storage       -55 +80 °C         relative humidity minimum       10 %         relative humidity at 55 °C according to IEC 60068-2-30       95 %         Main circuit	<ul> <li>of auxiliary circuit rated value</li> </ul>	6 kV
• at DC10g / 5 ms, 7,5g / 10 msshock resistance with sine pulse15g / 5 ms, 10g / 10 ms• at DC15g / 5 ms, 10g / 10 msmechanical service life (operating cycles)0000 000• of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor with added auxiliary switch block typical0000 000• of the contactor (Date)2000 m• attribute at height above sea level maximum2000 m• during operation-25 +60 °C• during storage-55 +80 °C• relative humidity at 55 °C according to IEC 60068-2-3095 %• Main circuit•		400 V
shock resistance with sine pulse       15g / 5 ms, 10g / 10 ms         e at DC       15g / 5 ms, 10g / 10 ms         mechanical service life (operating cycles)       0 000 000         • 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         • 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       2 000 m         installation altitude at height above sea level maximum       2 000 m         ambient temperature       -25 +60 °C         • during operation       -25 +80 °C         relative humidity minimum       10 %         relative humidity at 55 °C according to IEC 60068-2-30       95 %         Main circuit	shock resistance at rectangular impulse	
• at DC15g / 5 ms, 10g / 10 msmechanical service life (operating cycles)0• of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical5 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000reference code according to IEC 81346-2QSubstance Prohibitance (Date)10/01/2009Ambient conditions2 000 minstallation altitude at height above sea level maximum2 000 mambient temperature-25 +60 °C• during operation-25 +60 °C• during storage-55 +80 °Crelative humidity minimum10 %maximum95 %	• at DC	10g / 5 ms, 7,5g / 10 ms
mechanical service life (operating cycles)       10 000 000         • 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         • 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       2 000 m         installation altitude at height above sea level maximum       2 000 m         ambient temperature       -25 +60 °C         • during operation       -25 +80 °C         relative humidity minimum       10 %         relative humidity at 55 °C according to IEC 60068-2-30       95 %         Main circuit	shock resistance with sine pulse	
• of contactor typical10 000 000• of the contactor with added electronically optimized auxiliary switch block typical5 000 000• of the contactor with added auxiliary switch block typical10 000 000• of the contactor with added auxiliary switch block typical10 000 000reference code according to IEC 81346-2QSubstance Prohibitance (Date)10/01/2009Ambient conditions2 000 minstallation altitude at height above sea level maximum2 000 mambient temperature • during operation • during storage-25 +60 °C• during storage-55 +80 °Crelative humidity minimum10 %relative humidity at 55 °C according to IEC 60068-2-30 maximum95 %	• 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     of the contactor with added auxiliary switch block typical     of the contactor with added auxiliary switch block typical     installation attitude at height above sea level maximum     ambient conditions     installation altitude at height above sea level maximum     of during operation         -25 +60 °C         -25 +80 °C     relative humidity minimum     10 %     relative humidity at 55 °C according to IEC 60068-2-30     maximum     Main circuit	mechanical service life (operating cycles)	
auxiliary switch block typical10 000 000reference code according to IEC 81346-2QSubstance Prohibitance (Date)10/01/2009Ambient conditions2 000 minstallation altitude at height above sea level maximum2 000 mambient temperature-25 +60 °C• during operation-25 +60 °C• during storage-55 +80 °Crelative humidity minimum10 %Patient conditions95 %	<ul> <li>of contactor typical</li> </ul>	10 000 000
reference code according to IEC 81346-2       Q         Substance Prohibitance (Date)       10/01/2009         Ambient conditions       2 000 m         installation altitude at height above sea level maximum       2 000 m         ambient temperature       -25 +60 °C         • during operation       -25 +60 °C         • during storage       -55 +80 °C         relative humidity minimum       10 %         relative humidity at 55 °C according to IEC 60068-2-30 maximum       95 %		5 000 000
Substance Prohibitance (Date)       10/01/2009         Ambient conditions       installation altitude at height above sea level maximum         installation altitude at height above sea level maximum       2 000 m         ambient temperature       -25 +60 °C         • during operation       -25 +60 °C         • during storage       -55 +80 °C         relative humidity minimum       10 %         relative humidity at 55 °C according to IEC 60068-2-30 maximum       95 %         Main circuit	<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000
Ambient conditions         installation altitude at height above sea level maximum       2 000 m         ambient temperature       -25 +60 °C         • during operation       -25 +60 °C         • during storage       -55 +80 °C         relative humidity minimum       10 %         relative humidity at 55 °C according to IEC 60068-2-30 maximum       95 %         Main circuit	reference code according to IEC 81346-2	Q
installation altitude at height above sea level maximum       2 000 m         ambient temperature <ul> <li>during operation</li> <li>-25 +60 °C</li> <li>during storage</li> <li>-55 +80 °C</li> </ul> relative humidity minimum       10 %         relative humidity at 55 °C according to IEC 60068-2-30 maximum       95 %         Main circuit       4	Substance Prohibitance (Date)	10/01/2009
ambient temperature     -25 +60 °C       • during operation     -25 +60 °C       • during storage     -55 +80 °C       relative humidity minimum     10 %       relative humidity at 55 °C according to IEC 60068-2-30 maximum     95 %       Main circuit	Ambient conditions	
• during operation       -25 +60 °C         • during storage       -55 +80 °C         relative humidity minimum       10 %         relative humidity at 55 °C according to IEC 60068-2-30 maximum       95 %         Main circuit	installation altitude at height above sea level maximum	2 000 m
• during storage     -55 +80 °C       relative humidity minimum     10 %       relative humidity at 55 °C according to IEC 60068-2-30 maximum     95 %       Main circuit     -55 +80 °C	ambient temperature	
relative humidity minimum       10 %         relative humidity at 55 °C according to IEC 60068-2-30 maximum       95 %         Main circuit       40 %	during operation	-25 +60 °C
relative humidity at 55 °C according to IEC 60068-2-30       95 %         maximum       95 %         Main circuit       95 %	during storage	-55 +80 °C
Main circuit	relative humidity minimum	10 %
		95 %
	Main circuit	
number of poles for main current circuit 3	number of poles for main current circuit	3

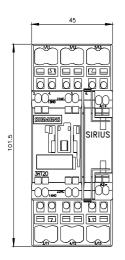
number of NO contacts for main contacts	3
operating voltage	
at AC-3 rated value maximum	690 V
<ul> <li>at AC-3e rated value maximum</li> </ul>	690 V
operational current	
• at AC-1 at 400 V at ambient temperature 40 °C rated	50 A
value	
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	50 A
— up to 690 V at ambient temperature 60 °C rated	42 A
value	
• at AC-3	
— at 400 V rated value	38 A
— at 500 V rated value	32 A
— at 690 V rated value	21 A
• at AC-3e	
— at 400 V rated value	38 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
at AC-5a up to 690 V rated value	44 A
• at AC-5b up to 400 V rated value	31.5 A
• at AC-6a	30.8 A
— up to 230 V for current peak value n=20 rated value	
— up to 400 V for current peak value n=20 rated value	30.8 A 30.8 A
<ul> <li>up to 500 V for current peak value n=20 rated value</li> <li>up to 690 V for current peak value n=20 rated value</li> </ul>	21 A
• at AC-6a	21A
<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	20.5 A
— up to 200 V for current peak value n=30 rated value	20.5 A
— up to 500 V for current peak value n=30 rated value	21.4 A
— up to 690 V for current peak value n=30 rated value	21 A
minimum cross-section in main circuit at maximum AC-1 rated	10 mm <sup>2</sup>
value	
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	
<ul> <li>at 1 current path at DC-1</li> </ul>	
— 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
<ul> <li>with 3 current paths in series at DC-1</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	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>	

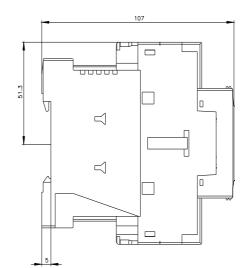
— at 24 V rated value	20 A
— at 60 V rated value	5 A
— at 110 V rated value	2.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.09 A
— at 600 V rated value	0.06 A
<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>	
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	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	18.5 kW
• at AC-3	
— at 230 V rated value	11 kW
— at 400 V rated value	18.5 kW
— at 500 V rated value	18.5 kW
— at 690 V rated value	18.5 kW
• at AC-3e	
— at 230 V rated value	11 kW
— at 400 V rated value	18.5 kW
— at 500 V rated value	18.5 kW
— at 690 V rated value	18.5 kW
operating power for approx. 200000 operating cycles at AC-	
4	
at 400 V rated value	6 kW
at 690 V rated value	10.3 kW
operating apparent power at AC-6a	12.2 1/1/1
up to 230 V for current peak value n=20 rated value	12.2 kVA
up to 400 V for current peak value n=20 rated value	21.3 KVA
up to 500 V for current peak value n=20 rated value	26.6 kVA
• up to 690 V for current peak value n=20 rated value	25 kVA
operating apparent power at AC-6a	8.1 kVA
<ul> <li>up to 230 V for current peak value n=30 rated value</li> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	6. I KVA 14.2 kVA
<ul> <li>up to 400 V for current peak value n=30 rated value</li> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	14.2 KVA 18.5 kVA
	25 kVA
up to 690 V for current peak value n=30 rated value     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>	593 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
<ul> <li>limited to 60 s switching at zero current maximum</li> </ul>	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	1 000 1/h
	750.44
• at AC-2 maximum	750 1/h
• at AC-3 maximum	750 1/h

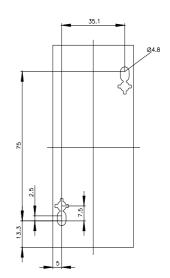
Control circuit/ Control	
type of voltage of the control supply voltage	DC
control supply voltage at DC	
rated value	110 V
operating range factor control supply voltage rated value of	
magnet coil at DC	
• initial value	0.8
full-scale value	1.1
closing power of magnet coil at DC	5.9 W
holding power of magnet coil at DC	5.9 W
closing delay	
• at DC	50 170 ms
opening delay	
• at DC	15 18 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	
• at 24 V rated value	10 A
• at 48 V rated value	6 A
• at 60 V rated value	6 A
• at 110 V rated value	3 A
• at 125 V rated value	2 A
<ul> <li>at 220 V rated value</li> </ul>	1 A
• at 600 V rated value	0.15 A
operational current at DC-13	
<ul> <li>at 24 V rated value</li> </ul>	10 A
<ul> <li>at 48 V rated value</li> </ul>	2 A
<ul> <li>at 60 V rated value</li> </ul>	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	34 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	3 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	25 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>	

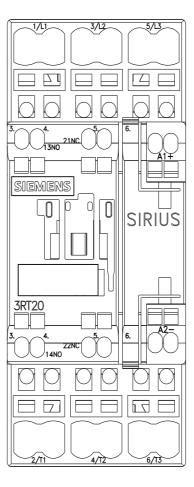
- with type of coordination 1 required	gG: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A (415V,80kA)
— with type of assignment 2 required	gG: 50A (690V,100kA), aM: 25A (690V, 100kA), BS88: 50A (415V, 80kA)
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	gG: 10 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
<ul> <li>side-by-side mounting</li> </ul>	Yes
height	102 mm
width	45 mm
depth	107 mm
required spacing	
• with side-by-side mounting	40
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm 0 mm
<ul> <li>— at the side</li> <li>for grounded parts</li> </ul>	0 mm
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
<ul> <li>for auxiliary and control circuit</li> </ul>	spring-loaded terminals
<ul> <li>at contactor for auxiliary contacts</li> </ul>	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)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 6 mm²)
<ul> <li>finely stranded without core end processing</li> </ul>	2x (1 6 mm²)
connectable conductor cross-section for main contacts	
• solid	1 10 mm²
● stranded	1 10 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	1 6 mm²
<ul> <li>finely stranded without core end processing</li> </ul>	1 6 mm²
connectable conductor cross-section for auxiliary contacts	
solid or stranded	0.5 2.5 mm <sup>2</sup>
finely stranded with core end processing	0.5 1.5 mm <sup>2</sup>
finely stranded without core end processing	0.5 2.5 mm²
type of connectable conductor cross-sections	
for auxiliary contacts	0 (05 05 1)
— solid or stranded	2x (0.5 2.5 mm <sup>2</sup> )
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm <sup>2</sup> )
— finely stranded without core end processing	2x (0.5 2.5 mm <sup>2</sup> )
for AWG cables for auxiliary contacts  AWG number as coded connectable conductor cross section	2x (20 14)
for main contacts	18 8
for auxiliary contacts	10 0 20 14
Safety related data	LV 17
product function	
mirror contact according to IEC 60947-4-1	Yes
B10 value with high demand rate according to SN 31920	450 000
	-30 000

	f-11					
proportion of danger			,			
	d rate according to SN 3192					
<ul> <li>with high demar</li> </ul>	nd rate according to SN 319	20 73 %	6			
ailure rate [FIT] with lo	ow demand rate according to	SN 31920 100	FIT			
T1 value for proof test 61508	interval or service life accor	ding to IEC 20 a	a			
protection class IP on the front according to IEC 60529		C 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 sv</li> </ul>		Vee	Yes			
	0	165				
ertificates/ approvals		_			_	
General Product App	proval					
() () ()		<u>Confirmation</u>	Ű	KC	EHC	
EMC	Functional Safety/Safety of Ma- chinery	Declaration of Confo	prmity	Test Certificates		
RCM	<u>Type Examination Cer-</u> tificate	UK CA	CE EG-Konf.	<u>Special Test Certific-</u> <u>ate</u>	Type Test Certific- ates/Test Report	
Marine / Shipping						
ABS			Llovd's Register us	PRS	RINA	
Marine / Shipping	other		Railway	Dangerous Good	Environment	
<b>KMRS</b>	<u>Confirmation</u>		Vibration and Shock	Transport Information	Environmental Con firmations	
urther information						
ttps://press.siemens.	t to exit the Russian marke com/global/en/pressrelease/	siemens-wind-down-ru	ssian-business			
	on the renewal of the curre cal Siemens office on the st	atus of validity of the EA		d to import or offer to supp	ly these products to a	
	other than the sanctioned E					
AC relevant market (						
AC relevant market (		w/100812975				
EAC relevant market ( nformation on the pa https://support.industry	/.siemens.com/cs/ww/en/vie					
EAC relevant market ( nformation on the pa https://support.industry nformation- and Dov	/.siemens.com/cs/ww/en/vie vnloadcenter (Catalogs, B					
AC relevant market ( nformation on the pa https://support.industry nformation- and Dov https://www.siemens.co ndustry Mall (Online	<u>v.siemens.com/cs/ww/en/vie</u> vnloadcenter (Catalogs, B <u>om/ic10</u> ordering system)	rochures,)				
EAC relevant market ( nformation on the pa https://support.industry nformation- and Dov https://www.siemens.c ndustry Mall (Online https://mall.industry.sie	v.siemens.com/cs/ww/en/vie vnloadcenter (Catalogs, B com/ic10 ordering system) emens.com/mall/en/en/Cata	rochures,)	2028-2BF40			
EAC relevant market ( nformation on the pa https://support.industry nformation- and Dow https://www.siemens.c ndustry Mall (Online https://mall.industry.sie Cax online generator	v.siemens.com/cs/ww/en/vie vnloadcenter (Catalogs, B com/ic10 ordering system) emens.com/mall/en/en/Cata	rochures,) og/product?mlfb=3RT2				
EAC relevant market ( nformation on the pa https://support.industry nformation- and Dow https://www.siemens.c ndustry Mall (Online https://mall.industry.sig Eax online generator http://support.automati Service&Support (Ma	v.siemens.com/cs/ww/en/vie vnloadcenter (Catalogs, B com/ic10 ordering system) emens.com/mall/en/en/Cata con.siemens.com/WW/CAXc anuals, Certificates, Chara	rochures,) og/product?mlfb=3RT2 rder/default.aspx?lange cteristics, FAQs,)		2		
EAC relevant market ( nformation on the pa https://support.industry nformation- and Dow https://www.siemens.c ndustry Mall (Online https://mall.industry.sie Cax online generator http://support.automati Service&Support (Ma https://support.industry mage database (pro	<u>v.siemens.com/cs/ww/en/vie</u> vnloadcenter (Catalogs, B <u>com/ic10</u> ordering system) emens.com/mall/en/en/Cata on.siemens.com/WW/CAXc anuals, Certificates, Chara <u>v.siemens.com/cs/ww/en/ps</u> duct images, 2D dimensio	rochures,) og/product?mlfb=3RT2 rder/default.aspx?lange cteristics, FAQs,) <u>3RT2028-2BF40</u> n drawings, 3D model	=en&mlfb=3RT2028-2BF4	-		
EAC relevant market ( nformation on the pa https://support.industry nformation- and Dow https://www.siemens.cc ndustry Mall (Online https://mall.industry.sie Cax online generator nttp://support.automati Service&Support (Ma https://support.industry mage database (pro http://www.automation	<u>v.siemens.com/cs/ww/en/vie</u> vnloadcenter (Catalogs, B <u>som/ic10</u> ordering system) emens.com/mall/en/en/Cata on.siemens.com/WW/CAXC anuals, Certificates, Chara v.siemens.com/cs/ww/en/ps duct images, 2D dimensio usiemens.com/bilddb/cax_detacatacatacatacatacatacatacatacatacatac	rochures,) og/product?mlfb=3RT2 rder/default.aspx?lange cteristics, FAQs,) '3RT2028-2BF40 n drawings, 3D model e.aspx?mlfb=3RT2028-	=en&mlfb=3RT2028-2BF4	-		
EAC relevant market ( nformation on the pa https://support.industry nformation- and Dow https://www.siemens.cc ndustry Mall (Online https://mall.industry.sie Cax online generator http://support.automati Service&Support (Ma https://support.industry mage database (pro- http://www.automation Characteristic: Tripp	<u>v.siemens.com/cs/ww/en/vie</u> vnloadcenter (Catalogs, B <u>com/ic10</u> ordering system) emens.com/mall/en/en/Cata on.siemens.com/WW/CAXc anuals, Certificates, Chara <u>v.siemens.com/cs/ww/en/ps</u> duct images, 2D dimensio	rochures,) og/product?mlfb=3RT2 rder/default.aspx?lange cteristics, FAQs,) 3RT2028-2BF40 n drawings, 3D model 2.aspx?mlfb=3RT2028- through current	=en&mlfb=3RT2028-2BF4	-		

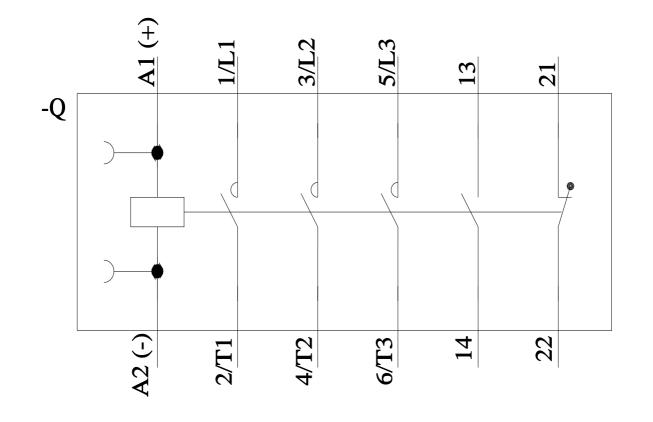








7/10/2023



last modified:

2/10/2023 🖸