## SIEMENS

## Data sheet

## 3RT2017-2BG41



power contactor, AC-3e/AC-3, 12 A, 5.5 kW / 400 V, 1 NO, 125 V DC 3-pole, frame size S00 spring-loaded terminal

product brand name         SIRIUS           product designation         SRT2           Central technical data         Stot           size of contactor         S00           product stansion         No           • function module for communication         No           • auxiliary switch         Yes           opworr loss [W] for rated value of the current         1.5 W           • at AC in hot operating state per pole         0.5 W           • of main circuit with degree of pollution 3 rated value         690 V           • of main circuit with degree of pollution 3 rated value         680 V           • of main circuit with degree of pollution 3 rated value         64 V           • of main circuit with degree of pollution 3 rated value         64 V           • of main circuit with degree of pollution 3 rated value         64 V           • of main circuit with degree of pollution 3 rated value         64 V           • of main circuit with degree of pollution 3 rated value         64 V           • of main circuit with degree of pollution 3 rated value         64 V           • of main circuit with degree of pollution 3 rated value         64 V           • of main circuit with added value         64 V           • at DC         7.3g / 5 ms, 4.7g / 10 ms           shock resistance at rectangular impulse	ind AST	
product type designation         3RT2           Ceneral technical data	product brand name	SIRIUS
General technical data     S00       size of contactor     S00       extinction module for communication     No       • auxiliary switch     Yes       power loss [W] for rated value of the current     • at AC in hot operating state     1.5 W       • at AC in hot operating state per pole     0.5 W     • without load current share typical       • of main circuit with degree of pollution 3 rated value     690 V     690 V       • of main circuit with degree of pollution 3 rated value     690 V     690 V       • of auxiliary circuit method value     6 kV     690 V       • of auxiliary circuit rated value     6 kV     600 V       • of auxiliary circuit rated value     6 kV     600 V       • of auxiliary circuit rated value     6 kV     600 V       • of auxiliary circuit rated value     6 kV     600 V       • of auxiliary circuit rated value     6 kV     600 V       • of auxiliary circuit rated value     6 kV     7.3g / 5 ms, 4.7g / 10 ms       stock resistance with sine pulse     11.4 g / 5 ms, 7.3g / 10 ms     1000 V       • of the contactor typical     30 000 000     5 000 000       • 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       • othe contactor with added auxiliary	product designation	Power contactor
size of contactor     S00       product extension     No       • function module for communication     No       • auxiliary switch     Yes       power loss [W] for rated value of the current     1.5 W       • at AC in hot operating state per pole     0.5 W       • without load current share typical     4 W       insulation voltage     600 V       • of main circuit with degree of pollution 3 rated value     690 V       • of auxiliary circuit with degree of pollution 3 rated value     640 V       • of auxiliary circuit rated value     6 kV       • of auxiliary structure of 10 for 10 6097-1     400 V       shock resistance at rectangular impulse     7.3g / 5 ms, 4.7g / 10 ms       shock resistance with sine pulse     11.4g / 5 ms, 7.3g / 10 ms       • at DC     5 000 000       mechanical service life (switching cycles)     30 000 000       • of the contactor with added electronically optimized auxiliary switch block typical     10 000 000       • of the contactor with added auxiliary switch block typical     2000 m       reference code according to IEC 81346-2     Q       Substance Prohibitance (Date)<	product type designation	3RT2
product extension         No           • function module for communication         No           • auxiliary switch         Yes           power loss [W] for rated value of the current         -           • at AC in hot operating state         1.5 W           • at AC in hot operating state prope         0.5 W           • at AC in hot operating state prope         0.5 W           • of nain 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         690 V           • of main circuit rated value         64V           • of main circuit rated value         64V           • of main contrates according to EN 60947-1         640 V           shock resistance at rectangular impulse         64V           • at DC         7.3g / 5 ms, 4.7g / 10 ms           shock resistance with sine pulse         11.4g / 5 ms, 7.3g / 10 ms           • at DC         7.3g / 5 ms, 7.3g / 10 ms           • 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         2 000 m           reference code acco	General technical data	
• function module for communicationNo• auxiliary switchYespower loss [W] for rated value of the current	size of contactor	S00
• auxiliary switch     Yes       power loss [W] for rated value of the current     1.5 W       • at AC in hot operating state     1.5 W       • at AC in hot operating state per pole     0.5 W       • without load current share typical     4 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 auxillary circuit rated value     6 kV       • at DC     7.3g / 5 ms, 4.7g / 10 ms       shock resistance at rectangular impulse     11,4g / 5 ms, 7.3g / 10 ms       • at DC     11,4g / 5 ms, 7.3g / 10 ms       • of the contactor with added 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 typi	product extension	
power loss [W] for rated value of the current     Image: Constraint of the current       • at AC in hot operating state     1.5 W       • at AC in hot operating state per pole     0.5 W       • withbout load current share typical     4 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       • at DC     7.3g / 5 ms, 4.7g / 10 ms       shock resistance with sine pulse     30 000 000       • 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	<ul> <li>function module for communication</li> </ul>	No
• at AC in hot operating state per pole       1.5 W         • at AC in hot operating state per pole       0.5 W         • without load current share typical       4 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 with degree of pollution 3 rated value       690 V         • of auxiliary circuit rated value       6 kV         • at DC       7.3g / 5 ms, 4.7g / 10 ms         • at DC       7.3g / 5 ms, 7.3g / 10 ms         • at DC       11.4g / 5 ms, 7.3g / 10 ms         • of contactor typical       30 000 000         • of the contactor with added electronically optimized auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       0 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of uning stratege       -25 +60 °C         • of uning storage       -25 +60 °C	<ul> <li>auxiliary switch</li> </ul>	Yes
• at AC in hot operating state per pole       0.5 W         • without load current share typical       4 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         • of main circuit rated value       6 kV         • of main circuit rated value       6 kV         • of auxiliary circuit rated value       6 kV         • at DC       7.3g / 5 ms, 4.7g / 10 ms         mechanical service life (switching cycles)       30 000 000         • 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 t	power loss [W] for rated value of the current	
• without load current share typical       4 W         insulation voltage       6 without load current share typical       4 W         • of main circuit with degree of pollution 3 rated value       690 V       690 V         • of main circuit rated value       690 V       690 V         • of main circuit rated value       690 V       690 V         • of main circuit rated value       6 kV       690 V         • of main circuit rated value       6 kV       6 kV         • of auxiliary circuit ated value       6 kV       6 kV         • of auxiliary circuit rated value       6 kV       400 V         shock resistance at rectangular inpulse       7.3g / 5 ms, 4.7g / 10 ms         • at DC       11,4g / 5 ms, 7,3g / 10 ms         mechanical service life (switching cycles)       30 000 000         • of the contactor with added electronically optimized auxiliary switch block typical       30 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10/01/2009         Ambient conditions       2.000 m         installation altitude at height above sea level maximum       2.000 m         ambient temperature       -55 +60 °C         • during sprage       -55 +80 °C      <	<ul> <li>at AC in hot operating state</li> </ul>	1.5 W
insulation voltage6of main circuit with degree of pollution 3 rated value690 Vof auxiliary circuit with degree of pollution 3 rated value690 Vsurge voltage resistance690 Vof main circuit rated value6 kVof auxiliary circuit rated value6 kVmaximum permissible voltage for safe isolation between coll and main contacts according to EN 60947-1400 Vshock resistance at rectangular impulse400 Vof at DC7.3g / 5 ms, 4.7g / 10 msshock resistance with sine pulse11,4g / 5 ms, 7,3g / 10 msof contactor typical30 000 000of the contactor with added electronically optimized auxiliary switch block typical5000 000of the contactor with added auxiliary switch block typical10 000 000of the contactor with added auxiliary switch block typical0voltage resion10/01/2009Ambient conditions2 000 mambient temperature oldring sorage-25 +60 °Cof during sorage-25 +60 °Cof uring sorage-25 +60 °C <t< th=""><th><ul> <li>at AC in hot operating state per pole</li> </ul></th><th>0.5 W</th></t<>	<ul> <li>at AC in hot operating state per pole</li> </ul>	0.5 W
• of main circuit with degree of pollution 3 rated value690 V• of auxiliary circuit with degree of pollution 3 rated value690 Vsurge voltage resistance690 V• of main circuit rated value6 kV• of main circuit rated value6 kV• of auxiliary circuit rated value6 kV• at DC7.3g / 5 ms, 4.7g / 10 msshock resistance with sine pulse11.4g / 5 ms, 7.3g / 10 ms• at DC11.4g / 5 ms, 7.3g / 10 ms• of the contactor typical30 000 000• of the contactor with added electronically optimized30 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 typical2 000 mmistallation altitude at height above sea level maximum ambient temperation • during operation • during operation • during storage-25 +60 °C • 55 +80 °C • 10 %relative humidity minimum maximum10 % 95 %	<ul> <li>without load current share typical</li> </ul>	4 W
• of auxiliary circuit with degree of pollution 3 rated value       690 V         surge voltage resistance       6         • of main circuit rated value       6 kV         • of auxiliary circuit rated value       6 kV         • at DC       7.3g / 5 ms, 4.7g / 10 ms         shock resistance with sine pulse       11,4g / 5 ms, 7.3g / 10 ms         • of the contactor with added electronically optimized auxiliary switch block typical       30 000 000         • 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 addee auxiliary switch block typical       2000 m         installation altitude at height above sea level maximum       2 000 m         ambient temperature       -25 +60 °C         • during operation       -25 +	insulation voltage	
value       value       correction         surge voltage resistance       6 kV         of main circuit rated value       6 kV         of auxiliary circuit rated value       6 kV         maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1       400 V         shock resistance at rectangular impulse       400 V         e at DC       7.3g / 5 ms, 4.7g / 10 ms         shock resistance with sine pulse       11,4g / 5 ms, 7,3g / 10 ms         e of contactor typical       30 000 000         of the contactor with added electronically optimized auxiliary switch block typical       30 000 000         of the contactor with added auxiliary switch block typical       10 000 000         reference code according to IEC 81346-2       Q         Substance Prohibitance (Date)       10 000 000         Ambient conditions       2 000 m         installation altitude at height above sea level maximum auting operation       -25 +60 °C         oturing operation       -25 +60 °C         oturing storage       -55 +80 °C         relative humidity minimum relative humidity minimum       10 %	<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	690 V
• of main circuit rated value6 kV• of auxiliary circuit rated value6 kV• of auxiliary circuit rated value6 kVmaximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1400 Vshock resistance at rectangular impulse400 V• at DC7.3g / 5 ms, 4.7g / 10 msshock resistance with sine pulse • at DC11.4g / 5 ms, 7.3g / 10 msmechanical service life (switching cycles)30 000 000• of the contactor typical30 000 000• of the contactor with added electronically optimized auxiliary switch block typical30 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 typical2 000 mmethent conditions2 000 minstallation altitude at height above sea level maximum ambient temperature • during operation2 000 m• during storage relative humidity minimum relative humidity minimum-25 +60 °C • C • 10 %• during storage relative humidity at 55 °C according to IEC 60068-2-30 maximum95 %	, , , , , , , , , , , , , , , , , , , ,	690 V
• of auxiliary circuit rated value6 kVmaximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1400 Vshock resistance at rectangular impulse400 V• at DC7.3g / 5 ms, 4.7g / 10 msshock resistance with sine pulse7.3g / 5 ms, 7.3g / 10 ms• at DC11,4g / 5 ms, 7,3g / 10 msmechanical service life (switching cycles)30 000 000• of the contactor with added electronically optimized auxiliary switch block typical30 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 by the del auxiliary switch block typical2 000 mmethent conditions2 000 minstallation altitude at height above sea level maximum ambient temperature • during storage2 000 m• during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum2 000 m	surge voltage resistance	
maximum permissible voltage for safe isolation between coil and main contacts according to EN 60947-1       400 V         shock resistance at rectangular impulse <ul> <li>at DC</li> <li>beta to C</li> <li>at DC</li> <li>at DC</li> <li>at DC</li> <li>beta to C</li> <li>at DC</li> <li>at DC</li> <li>beta to C</li> <li>beta to C</li> <li>at DC</li> <li>beta to C</li>             &lt;</ul>	<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       7.3g / 5 ms, 4.7g / 10 ms         shock resistance with sine pulse         • at DC       11,4g / 5 ms, 7,3g / 10 ms         mechanical service life (switching cycles)         • of contactor typical       30 000 000         • of the contactor with added electronically optimized auxiliary switch block typical       5 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         reference code according to IEC 81346-2       Q         Substance Prohibitance (Date)       10/01/2009         Ambient conditions       2 000 m         installation altitude at height above sea level maximum aubient temperature       -25 +60 °C         • during operation       -25 +60 °C         • during storage       -55 +80 °C         relative humidity minimum       10 %         relative humidity minimum       10 %	<ul> <li>of auxiliary circuit rated value</li> </ul>	6 kV
• at DC       7.3g / 5 ms, 4.7g / 10 ms         shock resistance with sine pulse       11.4g / 5 ms, 7.3g / 10 ms         • at DC       11.4g / 5 ms, 7.3g / 10 ms         mechanical service life (switching cycles)       30 000 000         • of contactor typical       30 000 000         • 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       2 000 m         installation altitude at height above sea level maximum atminent temperature       2 000 m         • 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 %		400 V
shock resistance with sine pulse       III,4g / 5 ms, 7,3g / 10 ms         e at DC       11,4g / 5 ms, 7,3g / 10 ms         mechanical service life (switching cycles)       30 000 000         • of contactor typical       30 000 000         • 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       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       95 %	shock resistance at rectangular impulse	
• at DC11,4g / 5 ms, 7,3g / 10 msmechanical service life (switching cycles)30 000 000• of contactor typical30 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 000reference code according to IEC 81346-2 Substance Prohibitance (Date)QAmbient conditions2 000 minstallation altitude at height above sea level maximum 	• at DC	7.3g / 5 ms, 4.7g / 10 ms
mechanical service life (switching cycles)       auxiliary service life (switching cycles)         • of contactor typical       30 000 000         • 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 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 %	shock resistance with sine pulse	
<ul> <li>of contactor typical</li> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>reference code according to IEC 81346-2</li> <li>Substance Prohibitance (Date)</li> <li>10/01/2009</li> <li>Ambient conditions</li> <li>2 000 m</li> <li>ambient temperature</li> <li>during operation</li> <li>during storage</li> <li>during storage</li> <li>relative humidity minimum</li> <li>10 %</li> <li>relative humidity at 55 °C according to IEC 60068-2-30 maximum</li> </ul>	• at DC	11,4g / 5 ms, 7,3g / 10 ms
<ul> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>of the contactor with added auxiliary switch block typical</li> <li>reference code according to IEC 81346-2</li> <li>Substance Prohibitance (Date)</li> <li>10/01/2009</li> <li>Ambient conditions</li> <li>ambient temperature         <ul> <li>during operation</li> <li>c25 +60 °C</li> <li>during storage</li> <li>c55 +80 °C</li> </ul> </li> <li>relative humidity minimum         <ul> <li>10 %</li> <li>95 %</li> </ul> </li> </ul>	mechanical service life (switching cycles)	
auxiliary switch block typical• of the contactor with added auxiliary switch block typicalreference code according to IEC 81346-2 Substance Prohibitance (Date)QAmbient conditionsinstallation altitude at height above sea level maximum• during operation • during storage-25 +60 °C -55 +80 °Crelative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum	51	
typical       Image: constraint of the second		5 000 000
Substance Prohibitance (Date)       10/01/2009         Ambient conditions       installation altitude at height above sea level maximum ambient temperature         • 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 yo 5%       95 %		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 %	reference code according to IEC 81346-2	Q
installation altitude at height above sea level maximum       2 000 m         ambient temperature       -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 %	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 %	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 %	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 95 %	ambient temperature	
relative humidity minimum       10 %         relative humidity at 55 °C according to IEC 60068-2-30       95 %         maximum       95 %	<ul> <li>during operation</li> </ul>	
relative humidity at 55 °C according to IEC 60068-2-30 95 %	6 6	
maximum		
Main circuit		95 %
	Main circuit	

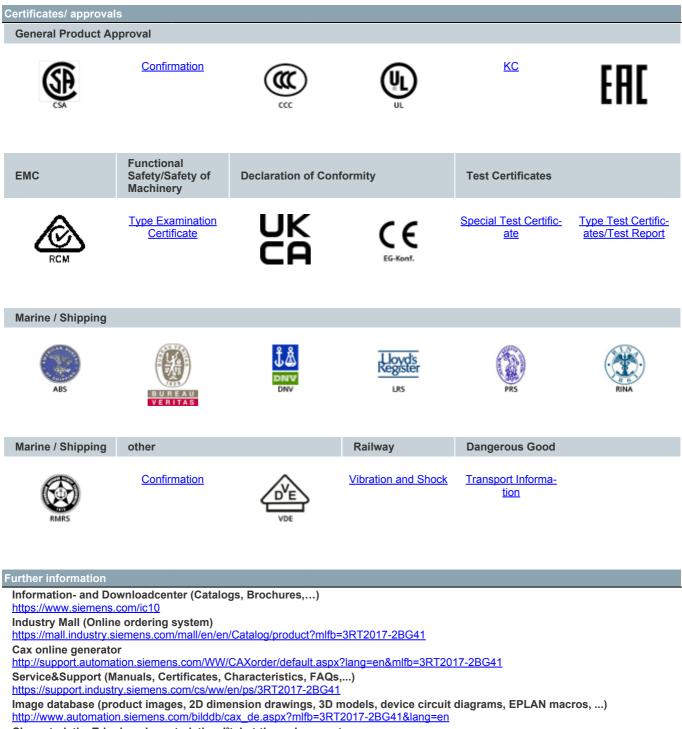
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
at AC-3 rated value maximum	690 \
at AC-3e rated value maximum	690 \
operational current         • at AC-1 at 400 V at ambient temperature 40 °C	22 A
rated value	22 A
● at AC-1	
— up to 690 V at ambient temperature 40 °C	22 A
rated value	
— up to 690 V at ambient temperature 60 °C rated value	20 A
• at AC-3	
— at 400 V rated value	12 A
— at 500 V rated value	9.2 A
— at 690 V rated value	6.7 A
• at AC-3e	
— at 400 V rated value	12 A
— at 500 V rated value	9.2 A
— at 690 V rated value	6.7 A
• at AC-4 at 400 V rated value	8.5 A
at AC-5a up to 690 V rated value	19.4 / 9.9 A
<ul> <li>at AC-5b up to 400 V rated value</li> <li>at AC-6a</li> </ul>	9.9 A
<ul> <li>at AC-ba</li> <li>up to 230 V for current peak value n=20 rated</li> </ul>	7.2 A
value	1.2 1
— up to 400 V for current peak value n=20 rated value	7.2 A
— up to 500 V for current peak value n=20 rated value	7.2 A
— up to 690 V for current peak value n=20 rated	6.7 A
value	0.77
• at AC-6a	
— up to 230 V for current peak value n=30 rated	4.8 A
value — up to 400 V for current peak value n=30 rated	4.8 A
value — up to 500 V for current peak value n=30 rated	4.8 A
value — up to 690 V for current peak value n=30 rated	4.8 A
value minimum cross-section in main circuit at maximum AC-1	4 mm
rated value	
operational current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	4.1 A
<ul> <li>at 690 V rated value</li> </ul>	3.3 A
operational current	
at 1 current path at DC-1	00 4
— at 24 V rated value — at 110 V rated value	20 A 2.1 A
— at 220 V rated value	2.1 A 0.8 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.6 A
<ul> <li>with 2 current paths in series at DC-1</li> </ul>	
— at 24 V rated value	20 A
— at 110 V rated value	12 A
— at 220 V rated value	1.6 A
— at 440 V rated value	0.8 A
— at 600 V rated value	0.7 A
with 3 current paths in series at DC-1     — at 24 V rated value	20 A
— at 24 V rated value — at 110 V rated value	20 A 20 A
— at 220 V rated value	20 A 20 A
— at 440 V rated value	1.3 A

'n

— at 600 V rated value	1 A
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	20 A
— at 110 V rated value	0.15 A
• with 2 current paths in series at DC-3 at DC-5	
— at 24 V rated value	20 A
— at 110 V rated value	0.35 A
<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul>	
— at 24 V rated value	20 A
— at 110 V rated value	20 A
— at 220 V rated value	1.5 A
— at 440 V rated value	0.2 A
— at 600 V rated value	0.2 A
operating power	
at AC-2 at 400 V rated value	5.5 kW
• at AC-3	
— at 230 V rated value	3 kW
— at 400 V rated value	5.5 kW
— at 500 V rated value	5.5 kW
— at 690 V rated value	5.5 kW
• at AC-3e	
— at 230 V rated value	3 kW
— at 400 V rated value	5.5 kW
— at 500 V rated value	5.5 kW
— at 690 V rated value	5.5 kW
operating power for approx. 200000 operating cycles at AC-4	
<ul> <li>at 400 V rated value</li> </ul>	2 kW
<ul> <li>at 690 V rated value</li> </ul>	2.5 kW
operating apparent power at AC-6a	
• up to 230 V for current peak value n=20 rated value	2.8 kVA
• up to 400 V for current peak value n=20 rated value	4.9 kVA
• up to 500 V for current peak value n=20 rated value	6.2 kVA
• up to 690 V for current peak value n=20 rated value	8 kVA
operating apparent power at AC-6a	
• up to 230 V for current peak value n=30 rated value	1.9 kVA
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	3.3 kVA
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	4.1 kVA
<ul> <li>up to 690 V for current peak value n=30 rated value</li> </ul>	5.7 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>	200 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	123 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 10 s switching at zero current maximum</li> </ul>	96 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 30 s switching at zero current maximum</li> </ul>	74 A; Use minimum cross-section acc. to AC-1 rated value
<ul> <li>limited to 60 s switching at zero current maximum</li> </ul>	61 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at DC	10 000 1/h
operating frequency	
<ul> <li>at AC-1 maximum</li> </ul>	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	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
-	0.8 1.1
initial value	
<ul><li>initial value</li><li>full-scale value</li></ul>	1.1

closing delay	
• at DC	30 100 ms
opening delay	
• at DC	7 13 ms
arcing time	10 15 ms
control version of the switch operating mechanism	Standard A1 - A2
Auxiliary circuit	
number of NO contacts for auxiliary contacts	1
instantaneous contact	
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
<ul> <li>at 500 V rated value</li> </ul>	2 A
<ul> <li>at 690 V rated value</li> </ul>	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
• at 220 V rated value	1 A
• at 600 V rated value	0.15 A
operational current at DC-13	
at 24 V rated value	10 A
<ul> <li>at 48 V rated value</li> </ul>	2 A
<ul> <li>at 60 V rated value</li> </ul>	2 A
<ul> <li>at 110 V rated value</li> </ul>	1 A
at 125 V rated value	0.9 A
<ul> <li>at 220 V rated value</li> </ul>	0.3 A
<ul> <li>at 600 V rated value</li> </ul>	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	
<ul> <li>at 480 V rated value</li> </ul>	11 A
<ul> <li>at 600 V rated value</li> </ul>	11 A
yielded mechanical performance [hp]	
<ul> <li>for single-phase AC motor</li> </ul>	
— at 110/120 V rated value	0.5 hp
— at 230 V rated value	2 hp
<ul> <li>for 3-phase AC motor</li> </ul>	
— at 200/208 V rated value	3 hp
— at 220/230 V rated value	3 hp
— at 460/480 V rated value	7.5 hp
— at 575/600 V rated value	10 hp
contact rating of auxiliary contacts according to UL	A600 / Q600
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: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)
<ul> <li>— with type of assignment 2 required</li> </ul>	gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (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
side-by-side mounting	Yes
height	70 mm
width	45 mm
depth required spacing	73 mm

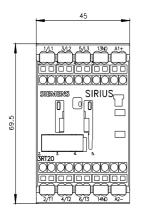
<ul> <li>with side-by-side mounting</li> </ul>	
<ul> <li>with side-by-side mounting</li> <li>forwards</li> </ul>	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
for grounded parts	
— forwards	10 mm
— upwards	10 mm
— at the side	6 mm
— downwards	10 mm
<ul> <li>for live parts</li> </ul>	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	6 mm
Connections/ Terminals	
type of electrical connection	
<ul> <li>for main current circuit</li> </ul>	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
<ul> <li>of magnet coil</li> </ul>	Spring-type terminals
type of connectable conductor cross-sections	
for main contacts	
— solid	2x (0.5 4 mm <sup>2</sup> )
— solid or stranded	2x (0,5 4 mm <sup>2</sup> )
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 2.5 mm <sup>2</sup> )
<ul> <li>finely stranded without core end processing</li> </ul>	2x (0.5 2.5 mm <sup>2</sup> )
at AWG cables for main contacts	2x (20 12)
connectable conductor cross-section for main contacts	
• solid	0.5 4 mm²
• stranded	0.5 4 mm <sup>2</sup>
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm <sup>2</sup>
<ul> <li>finely stranded without core end processing</li> </ul>	0.5 2.5 mm²
connectable conductor cross-section for auxiliary	
contacts	
<ul> <li>solid or stranded</li> </ul>	0.5 4 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm <sup>2</sup>
<ul> <li>finely stranded without core end processing</li> </ul>	0.5 2.5 mm²
type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
— solid or stranded	2x (0,5 4 mm <sup>2</sup> )
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 2.5 mm <sup>2</sup> )
— finely stranded without core end processing	2x (0.5 2.5 mm <sup>2</sup> )
<ul> <li>at AWG cables for auxiliary contacts</li> <li>AWG number as coded connectable conductor cross</li> </ul>	2x (20 12)
AWG number as coded connectable conductor cross section	
for main contacts	20 12
for auxiliary contacts	20 12
Safety related data	
product function	
mirror contact according to IEC 60947-4-1	Yes; with 3RH29
B10 value with high demand rate according to SN 31920	1 000 000
proportion of dangerous failures	
with low demand rate according to SN 31920	40 %
<ul> <li>with high demand rate according to SN 31920</li> </ul>	73 %
failure rate [FIT] with low demand rate according to SN	100 FIT
31920 T1 value for proof test interval or service life according to	20 y
IEC 61508 protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529 suitability for use	finger-safe, for vertical contact from the front
safety-related switching OFF	Yes
· salety-related switching Of I	100

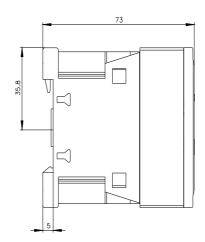


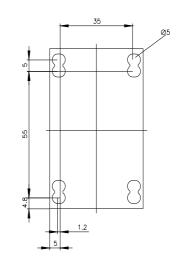
Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

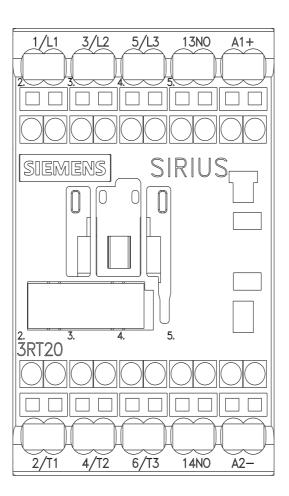
https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-2BG41/char

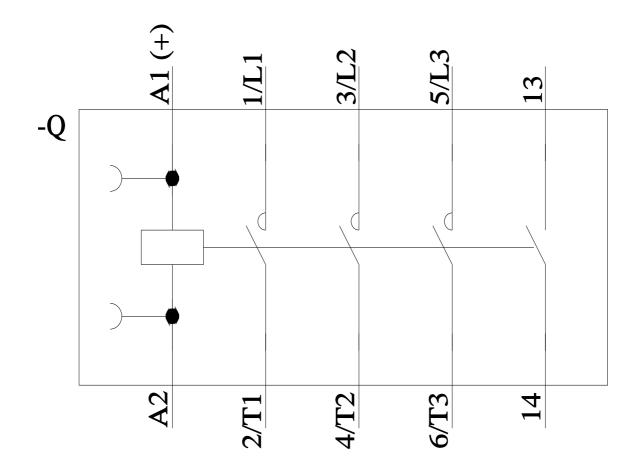
Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2017-2BG41&objecttype=14&gridview=view1











last modified:

11/21/2022 🖸