## SIEMENS

## Data sheet

## 3RT2017-1BG41



power contactor, AC-3e/AC-3, 12 A, 5.5 kW / 400 V, 3-pole, 125 V DC, auxiliary contacts: 1 NO, screw terminal, size: S00

product brand name         SIRUS           product designation         Power contactor           product type designation         SR12           Canaral technical data         S00           product extension         No           • function module for communication         No           • auxiliary switch         Yes           power loss [V] for rated value of the current         1.5 W           • at AC in hot operaing state         0.5 W           • without load current share typical         4 W           • of main circult with degree of pollution 3 rated value         690 V           • of auxiliary circult with degree of pollution 3 rated value         690 V           • of auxiliary circult with degree of pollution 3 rated value         690 V           • of auxiliary circult with degree of pollution 3 rated value         600 V           • of auxiliary circult rated value         64V           • of auxiliary circult rated value         64V           • of auxiliary circult rated value         64V           • of auxiliary circul rated value         64V           • of chain circult rated value         64V           • of chain circult rated value         7.3g / 5 ms. 4.7g / 10 ms           shock resistance at rectangular impulse         1.4g / 5 ms. 7.3g / 10 ms		
product type designation         3RT2           General technical data	product brand name	SIRIUS
General technical data     S00       size of contactor     S00       product extension     No       • auxiliary switch     Yes       power loss [W] for rated value of the current     1.5 W       • at AC in hot operating state     0.5 W       • without load current share typical     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     690 V       • of main circuit with degree of pollution 3 rated value     690 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 rated value     64 V       • of auxillary circuit rated value     60 V       • at DC     7.3g / 5 ms, 4.7g / 10 ms       mechanical service life (operating cycles)     30 000 000       • of the contactor with added electronically optimized auxillary switch block typical     30 000 000       • of the contactor with added auxillary switch block typical     10 000 000       • of the contactor with added auxillary switch block typical     10 000 000       • of the contactor with added auxillary switch block typical	product designation	Power contactor
size of contactor     S00       product extension     • function module for communication     No       • auxilary 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     690 V       • of main circult 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     64 V       • of auxiliary circuit rated value     64 V       • of auxiliary circuit rated value     64 V       • of main circuit trated value     64 V       • of auxiliary circuit rated value     64 V       • of auxiliary circuit rated value     64 V       • of auxiliary circuit rated value     64 V       • of auxiliary siture biologies     64 V       • of auxiliary siture biologies     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 (operating cycles)     5.000 000       • of the contactor with added electronically optimized     30 0000 00       • of the contactor with	product type designation	3RT2
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 prole     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 an in circuit rated value     690 V       • of main circuit rated value     64V       • of main circuit rated value     6 kV       • of main contacts according to EN colupt**1     5 kock resistance at rectangular impulse       • at DC     11.4g / 5 ms, 7.3g / 10 ms       mechanical service life (operating 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     10 000 000       • of the contactor with added auxiliary switch block typical     0 Q 00       Substance Prohibitance (Date)     10 101/2	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     1.5 W       • at AC in hot operating state per pole     0.5 W       • without load current share typical     4 W       Insulation voitage     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 atth degree of pollution 3 rated value     64 V       • of main circuit atth degree of pollution 3 rated value     64 V       • of main circuit atth degree of pollution 3 rated value     64 V       • of main circuit atth degree of pollution 3 rated value     64 V       • of main circuit rated value     64 V       • of main circuit rated value     64 V       • of auxiliary circuit rated value     64 V       • of auxiliary sincit hold poerating to EN 00947-1     400 V       shock resistance with sine pulse     7.3g / 5 ms, 7.3g / 10 ms       • at DC     11.4g / 5 ms, 7.3g / 10 ms       machineria service life (operating cycles)     30 000 000       • of the contactor with added electronically optimized     10 000 000       auxiliary switch block typical     10 000 000       reference code according to IEC 81346-2     Q    <	size of contactor	S00
• auxiliary switch         Yes           power loss [W] for rated value of the current         .5 W           • at AC in hot operating state per pole         0.5 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 rated value         690 V           • of main circuit rated value         64V           • of main circuit rated value         6 kV           • of auxiliary circuit with degree of pollution 3 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           • 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         30 000 000           • of ontactor 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<	product extension	
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         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         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 auxiliary circuit rated value         64 V           • 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         10.4g / 5 ms, 7.3g / 10 ms           mechanical service life (operating cycles)         5 000 000           • of the contactor with added auxiliary switch block typical         10 000 000           • of the contactor with added auxiliary	<ul> <li>function module for communication</li> </ul>	No
• at AC in hot operating state       1.5 W         • at AC in hot operating state price       0.5 W         • without load current share typical       4 W         insultation 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         • of auxiliary science at rectangular impulse       400 V         • at DC       7.3g / 5 ms, 4.7g / 10 ms         shock resistance with sine pulse       30 000 000         • at DC       11.4g / 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 electronically optimized auxiliary switch block typical       10 000 000         • of the contactor with added auxiliary switch block typical       10 000 000         reference code acc	<ul> <li>auxiliary switch</li> </ul>	Yes
• at AC in hot operating state per pole         0.5 W           • without bad current share typical         4 W           insulation voltage         6           • 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         11.4g / 5 ms, 7.3g / 10 ms           • at DC         11.4g / 5 ms, 7.3g / 10 ms           mechanical service life (operating cycles)         5000 000           • of contactor 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           reftence code according to IEC 81346-2	power loss [W] for rated value of the current	
without load current share typical     without load current share typical     without load current share typical     of main circuit with degree of pollution 3 rated value     e of auxiliary circuit with degree of pollution 3 rated value     foo V     surge voltage resistance         e of main circuit rated value         for while works of the degree of pollution 3 rated value         for while works of the degree of pollution 3 rated value         for works of the degree of pollution 3 rated value         for while works of the degree of pollution 3 rated value         for works of the degree of pollution 3 rated value         for works of the degree of pollution 3 rated value         for works of the degree of pollution 3 rated value         for works of the degree of pollution 3 rated value         for works of the degree of pollution 3 rated value         for works of the degree of pollution 3 rated value         for works of the degree of pollution 3 rated value         for works of the degree of pollution 3 rated value         for works of the degree of pollution 3 rated value         for works of the degree of pollution 3 rated value         for works of the degree of pollution 3 rated value         for works of the degree of pollution 3 rated value         for works of the degree of pollution 3 rated value         for the contactor typical         e of the contactor with added electronically optimized         auxiliary switch block typical         for the contactor with added auxiliary switch block typical         for the contactor with added auxiliary switch block typical         for the contactor with added auxiliary switch block typical         for the contactor with added auxiliary switch block typical         for the contactor with added auxiliary switch block typical         for the contactor with added auxiliary switch block typical         for the contactor with added electronically optimized         auxiliary switch block typical         for the contactor with added auxiliary switch block	<ul> <li>at AC in hot operating state</li> </ul>	1.5 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         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 coil and main contacts according to EN 60947-1       400 V         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 (operating cycles)       - 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         reference code according to IEC 8136-2       Q         Substance Prohibitance (Date)       10/01/2009         Ambient temperature       - 40 °C         • during storage       - 25 + 60 °C <th><ul> <li>at AC in hot operating state per pole</li> </ul></th> <th>0.5 W</th>	<ul> <li>at AC in hot operating state per pole</li> </ul>	0.5 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     68 V       • of main 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     7.3g / 5 ms, 4.7g / 10 ms       • 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 (operating 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     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 +60 °C       • during storage     -55 +60 °C       • felative humidity minimum     10 %       95 %     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 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         • at DC       400 V         • at DC       7.3g / 5 ms, 4.7g / 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 witch block typical       5000 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         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 storage       -55 +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       7.3g / 5 ms, 4.7g / 10 ms         • at DC       7.3g / 5 ms, 7.3g / 10 ms         mechanical service life (operating cycles)       00 000         • 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)       10/01/2009         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       400 V         • at DC       7.3g / 5 ms, 4.7g / 10 ms         shock resistance with sine pulse       7.3g / 5 ms, 7.3g / 10 ms         • at DC       11.4g / 5 ms, 7.3g / 10 ms         mechanical service life (operating cycles)       0000         • of the 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         reference code according to IEC 81346-2       Q         Substance Prohibitance (Date)       10/01/2009         Ambient conditions       2000 m         ambient temperature       -55 +60 °C         • during operation       -25 +60 °C         • during storage       -55 +80 °C         relative humidity minum       10 %         95 %       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 V         • 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 (operating cycles)       11,4g / 5 ms, 7.3g / 10 ms         • of tDC       11,4g / 5 ms, 7.3g / 10 ms         shock resistance 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)       10/01/2009         Amblent conditions       2 000 m         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 %         95 %       95 %	surge voltage resistance	
maximum permissible voltage for protective separation between       400 V         coil and main contacts according to EN 60947-1       400 V         shock resistance at rectangular impulse       7.3g / 5 ms, 4.7g / 10 ms         • at DC       7.3g / 5 ms, 7.3g / 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 (operating cycles)       000000         • 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         efference 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       -55 +60 °C         • during operation       -25 +60 °C         • during storage       -55 +80 °C         relative humidity minimum       10 %         95 %       95 %	<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 (operating cycles)       30 000 000         • of contactor typical       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         reference code according to IEC 81346-2       Q         Substance Prohibitance (Date)       10/01/2009         Ambient conditions       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 %         Main circuit	<ul> <li>of auxiliary circuit rated value</li> </ul>	6 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 msmechanical service life (operating cycles)30 000 000• of contactor typical30 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 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-25 +60 °C• during storage-55 +80 °Crelative humidity minimum10 %relative humidity at 55 °C according to IEC 60068-2-30 maximum95 %		400 V
shock resistance with sine pulse       11,4g / 5 ms, 7,3g / 10 ms         mechanical service life (operating cycles)       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       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       40 ming torage	shock resistance at rectangular impulse	
• at DC11,4g / 5 ms, 7,3g / 10 msmechanical service life (operating 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 000 000• 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 000 000• of the contactor with added auxiliary switch block typical20 000 m• ambient conditions2 000 m• installation altitude at height above sea level maximum2 000 m• during operation • during storage-25 +60 °C• during storage-55 +80 °Crelative humidity minimum10 %Main circuit95 %	• at DC	7.3g / 5 ms, 4.7g / 10 ms
mechanical service life (operating cycles)       30 000 000         • of contactor typical       5000 000         • of the contactor with added electronically optimized auxiliary switch block typical       5000 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       Main circuit	shock resistance with sine pulse	
• of contactor typical30 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	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>10 000 000</li> <li>reference code according to IEC 81346-2</li> <li>Q</li> <li>Substance Prohibitance (Date)</li> <li>10/01/2009</li> <li>Ambient conditions</li> <li>installation altitude at height above sea level maximum</li> <li>2 000 m</li> <li>ambient temperature         <ul> <li>during operation</li> <li>-25 +60 °C</li> <li>-55 +80 °C</li> </ul> </li> <li>relative humidity minimum</li> <li>10 %</li> <li>relative humidity at 55 °C according to IEC 60068-2-30 maximum</li> <li>maximum</li> </ul>	mechanical service life (operating cycles)	
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 %         Main circuit       95 %	<ul> <li>of contactor typical</li> </ul>	30 000 000
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 %         Main circuit       95 %		5 000 000
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 %	<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	
<ul> <li>during operation</li> <li>-25 +60 °C</li> <li>during storage</li> <li>-55 +80 °C</li> <li>relative humidity minimum</li> <li>10 %</li> <li>relative humidity at 55 °C according to IEC 60068-2-30 g5 %</li> <li>Main circuit</li> </ul>	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	ambient temperature	
relative humidity minimum       10 %         relative humidity at 55 °C according to IEC 60068-2-30       95 %         Main circuit       95 %	during operation	-25 +60 °C
relative humidity at 55 °C according to IEC 60068-2-30     95 %       Main circuit     95 %	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
<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	22 A
value	
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	22 A
— up to 690 V at ambient temperature 60 °C rated	20 A
value	
• 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 A
• at AC-5b up to 400 V rated value	9.9 A
● at AC-6a	
<ul> <li>— up to 230 V for current peak value n=20 rated value</li> </ul>	7.2 A
<ul> <li>— up to 400 V for current peak value n=20 rated value</li> </ul>	7.2 A
<ul> <li>— up to 500 V for current peak value n=20 rated value</li> </ul>	7.2 A
— up to 690 V for current peak value n=20 rated value	6.7 A
● at AC-6a	
<ul> <li>— up to 230 V for current peak value n=30 rated value</li> </ul>	4.8 A
<ul> <li>— up to 400 V for current peak value n=30 rated value</li> </ul>	4.8 A
<ul> <li>— up to 500 V for current peak value n=30 rated value</li> </ul>	4.8 A
<ul> <li>— up to 690 V for current peak value n=30 rated value</li> </ul>	4.8 A
minimum cross-section in main circuit at maximum AC-1 rated value	4 mm <sup>2</sup>
operational current for approx. 200000 operating cycles at AC-4	
at 400 V rated value	4.1 A
at 690 V rated value	3.3 A
operational current	
<ul> <li>at 1 current path at DC-1</li> </ul>	
— at 24 V rated value	20 A
— at 60 V rated value	20 A
— at 110 V rated value	2.1 A
— at 220 V rated value	0.8 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.6 A
• with 2 current paths in series at DC-1	
— at 24 V rated value	20 A
— at 60 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
<ul> <li>with 3 current paths in series at DC-1</li> </ul>	
— at 24 V rated value	20 A
— at 60 V rated value	20 A
— at 110 V rated value	20 A
— at 220 V rated value	20 A
— at 440 V rated value	1.3 A
— 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 60 V rated value	0.5 A
— at 110 V rated value	0.15 A
<ul> <li>with 2 current paths in series 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	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 60 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-	0.0 KW
4	
• at 400 V rated value	2 kW
• at 690 V rated value	2.5 kW
operating apparent power at AC-6a	
<ul> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	2.8 kVA
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	4.9 kVA
<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	6.2 kVA
<ul> <li>up to 690 V for current peak value n=20 rated value</li> </ul>	8 kVA
operating apparent power at AC-6a	
• up to 230 V for current peak value n=30 rated value	1.9 kVA
• up to 400 V for current peak value n=30 rated value	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	
• 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	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

	4.4
• full-scale value	1.1
closing power of magnet coil at DC	4 W
holding power of magnet coil at DC	4 W
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 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	1A
operational current at DC-12	
•	10 A
• at 24 V rated value	
• 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
<ul> <li>at 110 V rated value</li> </ul>	1 A
<ul> <li>at 125 V rated value</li> </ul>	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	
<ul> <li>at 480 V rated value</li> </ul>	11 A
• at 600 V rated value	11 A
yielded mechanical performance [hp]	
for single-phase AC motor	
— at 110/120 V rated value	0.5 hp
— at 230 V rated value	2 hp
• for 3-phase AC motor	
— 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	
Short-circuit protection	
design of the fuse link	
for short-circuit protection of the main circuit	
-	aC: 504 (600)/ 100k4), aM: 204 (600)/ 100k4), DC20, 254 (115) (20k4)
<ul> <li>with type of coordination 1 required</li> <li>with type of coordination 2 required</li> </ul>	gG: 50A (690V,100kA), aM: 20A (690V,100kA), BS88: 35A (415V,80kA)
— with type of assignment 2 required	gG: 20A (690V,100kA), aM: 16A (690V, 100kA), BS88: 20A (415V, 80kA)
• for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)
Installation/ mounting/ dimensions	
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
fastaning mathod	
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
side-by-side mounting	Yes
height	58 mm

width	45 mm
depth	73 mm
required spacing	
<ul> <li>with side-by-side mounting</li> </ul>	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
<ul> <li>for grounded parts</li> </ul>	
— 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
<ul> <li>for auxiliary and control circuit</li> </ul>	screw-type terminals
at contactor for auxiliary contacts	Screw-type terminals
of magnet coil	Screw-type terminals
type of connectable conductor cross-sections for main contacts	
solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
solid or stranded	2x (0,5 1,5 mm <sup>2</sup> ), 2x (0,75 2,5 mm <sup>2</sup> ), 2x 4 mm <sup>2</sup>
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0,5 1,5 mm <sup>2</sup> ), 2x (0,75 2,5 mm <sup>2</sup> )
connectable conductor cross-section for main contacts	2x (0.0 1.0 mm), 2x (0.70 2.0 mm)
solid	0.5 4 mm²
stranded	0.5 4 mm²
finely stranded with core end processing	0.5 2.5 mm <sup>2</sup>
connectable conductor cross-section for auxiliary contacts	0.5 2.5 mm
solid or stranded	0.5 4 mm²
finely stranded with core end processing	0.5 2.5 mm <sup>2</sup>
	0.5 2.5 mm
type of connectable conductor cross-sections	
for auxiliary contacts	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
— solid or stranded	
— finely stranded with core end processing	2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> )
for AWG cables for auxiliary contacts	2x (20 16), 2x (18 14), 2x 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> <li>with high demand rate according to SN 31920</li> </ul>	40 % 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 EC	20 a
61508	20 α
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
suitability for use	
safety-related switching OFF	Yes
Certificates/ approvals	

SP M		<u>Confirmation</u>		KC	EHC
EMC	Functional Safety/Safety of Ma- chinery	Declaration of Conform	nity	Test Certificates	
RCM	<u>Type Examination Cer-</u> <u>tificate</u>	UK CA	CE EG-Konf.	Type Test Certific- ates/Test Report	<u>Special Test Certific-</u> <u>ate</u>
Marine / Shipping					
ABS	B UREAU VERITAS		Lloyd's Register us	PRS	RINA
Marine / Shipping	other		Railway	Dangerous Good	Environment
RMRS	<u>Confirmation</u>	UDE VDE	Vibration and Shock	Transport Information	Environmental Con- firmations
Further information					
Siemens has decided to exit the Russian market (see here). https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business Siemens is working on the renewal of the current EAC certificates. Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus). Information on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875 Information- and Downloadcenter (Catalogs, Brochures,) https://www.siemens.com/ic10 Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2017-1BG41					

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2017-1BG41

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-1BG4

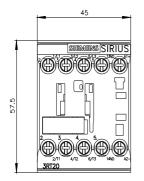
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2017-1BG41&lang=en

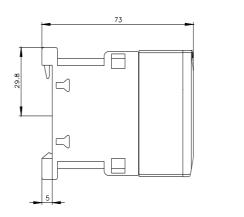
Characteristic: Tripping characteristics, I2t, Let-through current

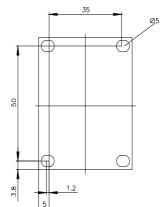
https://support.industry.siemens.com/cs/ww/en/ps/3RT2017-1BG41/char

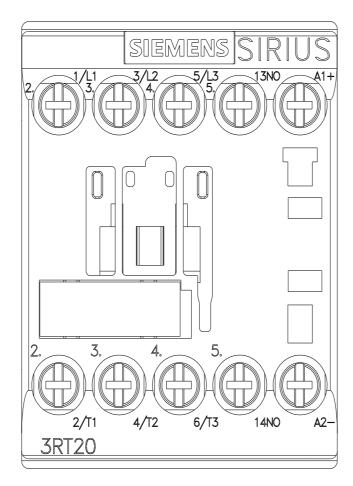
Further characteristics (e.g. electrical endurance, switching frequency)

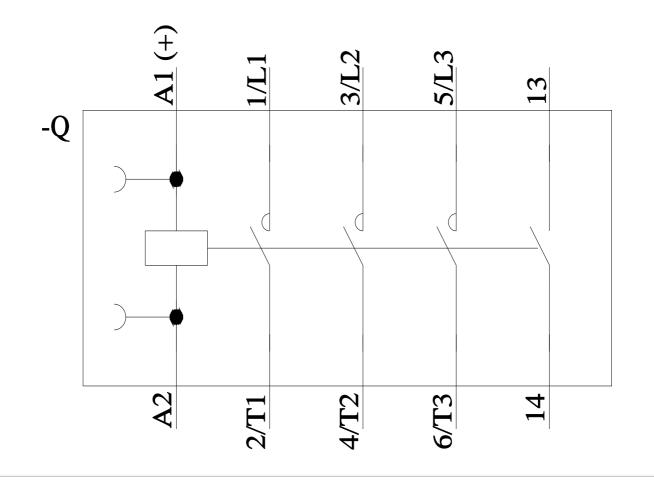
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