## SIEMENS

## Data sheet

## 3RT2028-4AK60



power contactor, AC-3e/AC-3, 38 A, 18.5 kW / 400 V, 3-pole, 110 V AC, 50 Hz / 120 V, 60 Hz, auxiliary contacts: 1 NO + 1 NC, ring cable lug connection, size: S0

product brand name         SIRUS           product designation         Power contactor           product type designation         3R12           Central technical data         S0           size of contactor         S0           product extension         No           • auxilary 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         10.5 W           insultation voltage         690 V           • of main circuit with degree of pollution 3 rated value         690 V           • of auxilary circuit rated value         6 kV           • of ontain contacts according to EN 60947-1         400 V           shock resistance at rectangular impulse         13.5g / 5 ms, 5.3g / 10 ms           • at AC         8.3g / 5 ms, 5.3g / 10 ms           mechanical service IIfe (operating cycles)         10 000 000           • of th	• •			
product type designation         3RT2           General technical data	product brand name	SIRIUS		
General technical data     S0       size of contactor     S0       product extension     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     9.6 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       • of auxiliary circuit with degree of pollution 3 rated value     64V       • of main circuit rated value     64V       • of auxiliary circuit rate value     64V       • of auxiliary circuit rate value     64V       • at AC     8.3g / 5 ms, 5.3g / 10 ms       mechanical service life (operating cycles)     10 000 000       • of the contactor with added acteronically optimized auxiliary switch block typical     10 000 000       • of the contactor with added acteronically optimized auxiliary switch block typical     10 000 000       • of the contactor with added acteronically optimized auxiliary switch block typical     10 000 000	product designation	Power contactor		
size of contactor         S0           product extension         • function module for communication         No           • auxilary switch         Yes           power loss [W] for rated value of the current         9.6 W           • at AC in hot operating state per pole         3.2 W           • without load current share typical         10.5 W           Insulation voltage         690 V           • of main circuit with degree of pollution 3 rated value         690 V           • of auxillary 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         64V           • of main circuit rated value         64V           • of main circuit rated value         64V           • of main circuit rated value         64V           • of auxillary switch bio pulse         8.3g / 5 ms, 5.3g / 10 ms           machanical service life (operating cycles)         10 000 000      <	product type designation	3RT2		
product extension     No       • function module for communication     No       • auxiliary switch     Yes       opwer 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     10.5 W       insulation voltage     690 V       • of main circui with degree of pollution 3 rated value     690 V       • of main circui twith degree of pollution 3 rated value     690 V       • of main circui trated value     6 kV       • of main circui trated value     6 kV       • of main circuit rated value     6 kV       • of main contacts according to EN 00947-1     5 kok       shock resistance at rectangular impulse     6 kV       • at AC     13,5g / 5 ms, 5,3g / 10 ms       shock resistance with sine pulse     10 000 000       • at AC     13,5g / 5 ms, 8,3g / 10 ms       mechanical service life (operating cycles)     10 000 000       • of the contactor with added electronically optimized     5000 000       auxiliary switch block typical     10 000 000       efference code according to EE 81346-2     Q       Q     Q       Substance Prohibitance (Date)     10/01/2009       Ambient temperature     405 °C       • duri	General technical data			
• 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 per pole       3.2 W         • without load current share typical       10.5 W         Insultation 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 ated value       6 kV         • of main circuit rated value       6 kV         • of auxiliary contractive value in pulse       8.3g / 5 ms, 8.3g / 10 ms         • at AC       13.5g / 5 ms, 8.3g / 10 ms         stock resistance with sine pulse       10 000 000         • of the co	size of contactor	S0		
• 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         10.5 W           insuliary circuit with degree of pollution 3 rated value         690 V           • of main circuit rated value         690 V           • of main circuit rated value         690 V           • of main circuit rated value         64V           • of auxiliary oricuit with degree of pollution 3 rated value         64V           • of main circuit rated value         64V           • of auxiliary oricuit rated value         64V           • of auxiliary oricuit rated value         64V           • of auxiliary oricuit rated value         64V           • at AC         8,3g / 5 ms, 8,3g / 10 ms           • at AC         13,5g / 5 ms, 8,3g / 10 ms           • at AC         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	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       • without load current share typical     10.5 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       • of auxiliary circuit with degree of pollution 3 rated value     690 V       • of auxiliary circuit rated value     6 kV       • of main circuit rated value     6 kV       • of auxiliary circuit rated value     6 kV       • at AC     8.3g / 5 ms, 5.3g / 10 ms       shock resistance with sine pulse     13.5g / 5 ms, 8.3g / 10 ms       • at AC     10.00 000       • of the contactor with added auxiliary switch block typical     10 000 000       • of the contactor with added auxiliary switch block typical     10/00 1/2009       Ambient conditions     10/01/2009       Installation altitude at height above	<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     10.5 W       insultation 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 rated value     6 kV       • of main circuit rated value     6 kV       • of auxiliary circuit rated value     8 sock resistance at rectangular impulse       • at AC     8.3g / 5 ms, 5.3g / 10 ms       shock resistance with sine pulse     13.5g / 5 ms, 8.3g / 10 ms       • at AC     13.5g / 5 ms, 8.3g / 10 ms       • of the contactor with added electronically optimized     10 000 000       • of the contactor with added electronically optimized     10 000 000       • of the contactor with added electronically optimized     10 000 000	auxiliary switch	Yes		
• at AC in hot operating state per pole       3.2 W         • without load current share typical       10.5 W         insulation voltage       60 min 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 auxiliary circuit rated value       6 kV         • at AC       8.3g / 5 ms, 5.3g / 10 ms         shock resistance at rectangular impulse       -         • at AC       13.5g / 5 ms, 8.3g / 10 ms         mechanical service life (operating cycles)       10 000 000         • of contactor 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 IE	power loss [W] for rated value of the current			
without load current share typical     10.5 W      insulation voltage         of main circuit with degree of pollution 3 rated value         690 V      surge voltage resistance         of main circuit with degree of pollution 3 rated value         690 V      surge voltage resistance         of main circuit with degree of pollution 3 rated value         600 V      surge voltage resistance         of main circuit rated value         6 kV         of auxiliary circuit rated value         6 kV         axinum permissible voltage for protective separation between         d00 V          shock resistance at rectangular impulse         at AC         slop voltage         auxiliary switch block typical         10 000 000         reference code according to IEC 81346-2         Q         Substance Prohibitance (Date)         during voltage         at height above sea level maximum         slop voltage         at ABP voltage         slop voltage	<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         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       8.3g / 5 ms, 5.3g / 10 ms         • at AC       8.3g / 5 ms, 8.3g / 10 ms         shock resistance with sine pulse       13.5g / 5 ms, 8.3g / 10 ms         • at AC       13.5g / 5 ms, 8.3g / 10 ms         mechanical service life (operating cycles)       10 000 000         • of the contactor with added electronically optimized auxiliary switch block typical       10 000 000         reference code according to IEC 81348-2       Q         Substance Prohibitance (Date)       10/01/2009         Ambient temperature       -       -         • during storage       -25 +60 °C         • during storage       -25 +60 °C         • during storage       -25 +60 °C	<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     6 kV       • 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     8,3g / 5 ms, 5,3g / 10 ms       • at AC     8,3g / 5 ms, 5,3g / 10 ms       shock resistance with sine pulse     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     -25 +60 °C       • during operation     -25 +60 °C       • during storage     -55 +60 °C       • during storage     -55 +60 °C       • felative humidity at 55 °C according to IEC 60068-2.30     95 %	<ul> <li>without load current share typical</li> </ul>	10.5 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         maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1       400 V         shock resistance at rectangular impulse       6 kV         • at AC       8,3g / 5 ms, 5,3g / 10 ms         shock resistance with sine pulse       -         • at AC       13,5g / 5 ms, 8,3g / 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         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         • during storage       -55 +60 °C         • felative humidity at 55 °C according to IEC 60068-2.30	insulation voltage			
surge voltage resistance       6         • 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       8,3g / 5 ms, 5,3g / 10 ms         • at AC       8,3g / 5 ms, 8,3g / 10 ms         shock resistance with sine pulse       00 000         • 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         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       95 %         Main circuit       Main circuit	<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         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 AC       8,3g / 5 ms, 5,3g / 10 ms         shock resistance with sine pulse       8,3g / 5 ms, 8,3g / 10 ms         • at AC       13,5g / 5 ms, 8,3g / 10 ms         mechanical service life (operating cycles)       10 000 000         • of the contactor rypical       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 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 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 AC       8,3g / 5 ms, 5,3g / 10 ms         shock resistance with sine pulse       -         • at AC       13,5g / 5 ms, 8,3g / 10 ms         mechanical service life (operating cycles)       -         • 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         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 at 55 °C according to IEC 60068-2-30       95 %         Main circuit       J0 %	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 AC</li> <li>8,3g / 5 ms, 5,3g / 10 ms</li> </ul> shock resistance at rectangular impulse <ul> <li>at AC</li> <li>8,3g / 5 ms, 5,3g / 10 ms</li> </ul> mechanical service life (operating cycles) <ul> <li>of contactor typical</li> <li>10 000 000</li> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> <li>10 000 000</li> </ul> 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 AC       8,3g / 5 ms, 5,3g / 10 ms         shock resistance with sine pulse         • at AC       13,5g / 5 ms, 8,3g / 10 ms         mechanical service life (operating cycles)         • of contactor typical         • of the contactor with added electronically optimized auxiliary switch block typical         • of the contactor with added auxiliary switch block typical         • of the contactor with added auxiliary switch block typical         • of the contactor with added auxiliary switch block typical         • of the contactor go to EX 81346-2         Q         Substance Prohibitance (Date)         10/01/2009         Ambient conditions         installation altitude at height above sea level maximum         2 000 m         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         maximum	<ul> <li>of auxiliary circuit rated value</li> </ul>	6 kV		
• at AC       8,3g / 5 ms, 5,3g / 10 ms         shock resistance with sine pulse       13,5g / 5 ms, 8,3g / 10 ms         • at AC       13,5g / 5 ms, 8,3g / 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       40 min circuit		400 V		
shock resistance with sine pulse       integration (registricm)         • at AC       13,5g / 5 ms, 8,3g / 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       40 mino circuit	shock resistance at rectangular impulse			
• at AC13,5g / 5 ms, 8,3g / 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 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 AC	8,3g / 5 ms, 5,3g / 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 +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       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 °Crelative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum95 %	• at AC	13,5g / 5 ms, 8,3g / 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>Main circuit</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>	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       2 000 m         ambient 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 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       400 m	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 %	<ul> <li>during operation</li> </ul>	-25 +60 °C		
relative humidity at 55 °C according to IEC 60068-2-30 95 % Main circuit	during storage	-55 +80 °C		
maximum Main circuit	relative humidity minimum	10 %		
		95 %		
number of poles for main current circuit 3	Main circuit			
	number of poles for main current circuit	3		

number of NO contacts for main contacts	3
operating voltage	
at AC-3 rated value maximum	690 V
<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 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				
<ul> <li>up to 230 V for current peak value n=20 rated value</li> </ul>	12.2 kVA			
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	21.3 kVA			
<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	26.6 kVA			
<ul> <li>up to 690 V for current peak value n=20 rated value</li> </ul>	25 kVA			
operating apparent power at AC-6a				
• up to 230 V for current peak value n=30 rated value	8.1 kVA			
• up to 400 V for current peak value n=30 rated value	14.2 kVA			
• up to 500 V for current peak value n=30 rated value	18.5 kVA			
• up to 690 V for current peak value n=30 rated value	25 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>	593 A; Use minimum cross-section acc. to AC-1 rated value			
- miniou to a 5 switching at Zero current maximum				
-	341 A: Use minimum cross-section acc. to AC-1 rated value			
• limited to 5 s switching at zero current maximum	341 A; Use minimum cross-section acc. to AC-1 rated value			
<ul> <li>limited to 5 s switching at zero current maximum</li> <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 5 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> </ul>	260 A; Use minimum cross-section acc. to AC-1 rated value 199 A; Use minimum cross-section acc. to AC-1 rated value			
<ul> <li>limited to 5 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> </ul>	260 A; Use minimum cross-section acc. to AC-1 rated value			
<ul> <li>limited to 5 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> </ul>	260 A; Use minimum cross-section acc. to AC-1 rated value 199 A; Use minimum cross-section acc. to AC-1 rated value 162 A; Use minimum cross-section acc. to AC-1 rated value			
<ul> <li>limited to 5 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> </ul> <b>no-load switching frequency</b> <ul> <li>at AC</li> </ul>	260 A; Use minimum cross-section acc. to AC-1 rated value 199 A; Use minimum cross-section acc. to AC-1 rated value			
<ul> <li>limited to 5 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> </ul> no-load switching frequency <ul> <li>at AC</li> </ul> operating frequency	260 A; Use minimum cross-section acc. to AC-1 rated value 199 A; Use minimum cross-section acc. to AC-1 rated value 162 A; Use minimum cross-section acc. to AC-1 rated value 5 000 1/h			
<ul> <li>limited to 5 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> </ul> no-load switching frequency <ul> <li>at AC</li> </ul> operating frequency <ul> <li>at AC-1 maximum</li> </ul>	260 A; Use minimum cross-section acc. to AC-1 rated value 199 A; Use minimum cross-section acc. to AC-1 rated value 162 A; Use minimum cross-section acc. to AC-1 rated value 5 000 1/h 1 000 1/h			
<ul> <li>limited to 5 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>no-load switching frequency</li> <li>at AC</li> <li>operating frequency</li> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> </ul>	260 A; Use minimum cross-section acc. to AC-1 rated value 199 A; Use minimum cross-section acc. to AC-1 rated value 162 A; Use minimum cross-section acc. to AC-1 rated value 5 000 1/h 1 000 1/h 750 1/h			
<ul> <li>limited to 5 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>no-load switching frequency <ul> <li>at AC</li> </ul> </li> <li>operating frequency <ul> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> </ul> </li> </ul>	260 A; Use minimum cross-section acc. to AC-1 rated value 199 A; Use minimum cross-section acc. to AC-1 rated value 162 A; Use minimum cross-section acc. to AC-1 rated value 5 000 1/h 1 000 1/h 750 1/h 750 1/h			
<ul> <li>limited to 5 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>no-load switching frequency <ul> <li>at AC</li> </ul> </li> <li>operating frequency <ul> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-3 emaximum</li> </ul> </li> </ul>	260 A; Use minimum cross-section acc. to AC-1 rated value 199 A; Use minimum cross-section acc. to AC-1 rated value 162 A; Use minimum cross-section acc. to AC-1 rated value 5 000 1/h 1 000 1/h 750 1/h 750 1/h 750 1/h			
<ul> <li>limited to 5 s switching at zero current maximum</li> <li>limited to 10 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 60 s switching at zero current maximum</li> <li>no-load switching frequency <ul> <li>at AC</li> </ul> </li> <li>operating frequency <ul> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> </ul> </li> </ul>	260 A; Use minimum cross-section acc. to AC-1 rated value 199 A; Use minimum cross-section acc. to AC-1 rated value 162 A; Use minimum cross-section acc. to AC-1 rated value 5 000 1/h 1 000 1/h 750 1/h 750 1/h			

type of voltage of the control supply voltage	AC			
control supply voltage at AC				
• at 50 Hz rated value	110 V			
• at 60 Hz rated value	120 V			
operating range factor control supply voltage rated value of magnet coil at AC				
• at 50 Hz	0.8 1.1			
• at 60 Hz	0.8 1.1			
apparent pick-up power of magnet coil at AC				
• at 50 Hz	81 VA			
• at 60 Hz	79 VA			
inductive power factor with closing power of the coil				
• at 50 Hz	0.72			
• at 60 Hz	0.74			
apparent holding power of magnet coil at AC				
• at 50 Hz	10.5 VA			
• at 60 Hz	8.5 VA			
inductive power factor with the holding power of the coil				
• at 50 Hz	0.25			
• at 60 Hz	0.28			
closing delay				
• at AC	8 40 ms			
opening delay				
• at AC	4 16 ms			
arcing time	10 10 ms			
control version of the switch operating mechanism	Standard A1 - A2			
Auxiliary circuit				
number of NC contacts for auxiliary contacts instantaneous	1			
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				
<ul> <li>at 230 V rated value</li> </ul>	10 A			
• at 400 V rated value	3 A			
• at 500 V rated value	2 A			
<ul><li>at 500 V rated value</li><li>at 690 V rated value</li></ul>				
at 500 V rated value     at 690 V rated value  operational current at DC-12	2 A 1 A			
at 500 V rated value     at 690 V rated value  operational current at DC-12     at 24 V rated value	2 A 1 A 10 A			
at 500 V rated value     at 690 V rated value  operational current at DC-12      at 24 V rated value      at 48 V rated value	2 A 1 A 10 A 6 A			
at 500 V rated value     at 690 V rated value  operational current at DC-12     at 24 V rated value	2 A 1 A 10 A 6 A 6 A			
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> </ul> <b>operational current at DC-12</b> <ul> <li>at 24 V rated value</li> <li>at 48 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> </ul>	2 A 1 A 10 A 6 A 6 A 3 A			
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> </ul> <b>operational current at DC-12</b> <ul> <li>at 24 V rated value</li> <li>at 48 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> </ul>	2 A 1 A 10 A 6 A 6 A 3 A 2 A			
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> </ul> <b>operational current at DC-12</b> <ul> <li>at 24 V rated value</li> <li>at 48 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> </ul>	2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A			
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> </ul> <b>operational current at DC-12</b> <ul> <li>at 24 V rated value</li> <li>at 48 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> </ul>	2 A 1 A 10 A 6 A 6 A 3 A 2 A			
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> </ul> <b>operational current at DC-12</b> <ul> <li>at 24 V rated value</li> <li>at 48 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> </ul>	2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A			
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> </ul> <b>operational current at DC-12</b> <ul> <li>at 24 V rated value</li> <li>at 48 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> </ul>	2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A			
at 500 V rated value     at 690 V rated value  operational current at DC-12      at 24 V rated value     at 48 V rated value     at 60 V rated value     at 110 V rated value     at 125 V rated value     at 220 V rated value     at 600 V rated value     at 600 V rated value     at 600 V rated value	2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A 0.15 A			
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> <li>operational current at DC-12</li> <li>at 24 V rated value</li> <li>at 48 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>at 24 V rated value</li> <li>at 24 V rated value</li> </ul>	2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A			
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> <li>operational current at DC-12 <ul> <li>at 24 V rated value</li> <li>at 48 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>at 24 V rated value</li> <li>at 24 V rated value</li> </ul> </li> </ul>	2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A			
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> <li>operational current at DC-12</li> <li>at 24 V rated value</li> <li>at 48 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>at 48 V rated value</li> <li>at 48 V rated value</li> <li>at 48 V rated value</li> <li>at 600 V rated value</li> </ul>	2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 2 A			
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> <li>operational current at DC-12</li> <li>at 24 V rated value</li> <li>at 48 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> <li>at 48 V rated value</li> <li>at 24 V rated value</li> <li>at 600 V rated value</li> <li>at 24 V rated value</li> <li>at 24 V rated value</li> <li>at 24 V rated value</li> <li>at 48 V rated value</li> <li>at 60 V rated value</li> <li>at 60 V rated value</li> </ul>	2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 1 A 1 A			
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> <li>operational current at DC-12 <ul> <li>at 24 V rated value</li> <li>at 48 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>at 48 V rated value</li> <li>at 24 V rated value</li> <li>at 24 V rated value</li> <li>at 10 V rated value</li> <li>at 10 V rated value</li> </ul> </li> </ul>	2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 1 A 0.9 A			
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> <li>operational current at DC-12 <ul> <li>at 24 V rated value</li> <li>at 48 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> </ul> </li> <li>operational current at DC-13 <ul> <li>at 24 V rated value</li> <li>at 48 V rated value</li> <li>at 48 V rated value</li> <li>at 24 V rated value</li> <li>at 60 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> </ul> </li> </ul>	2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 1 A 0.15 A			
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> <li>operational current at DC-12 <ul> <li>at 24 V rated value</li> <li>at 48 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> </ul> </li> <li>operational current at DC-13 <ul> <li>at 24 V rated value</li> <li>at 48 V rated value</li> <li>at 48 V rated value</li> <li>at 24 V rated value</li> <li>at 20 V rated value</li> <li>at 220 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> </ul> </li> </ul>	2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 1 A 0.15 A 10 A 2 A 1 A 0.15 A			
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> <li>operational current at DC-12 <ul> <li>at 24 V rated value</li> <li>at 48 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> </ul> </li> <li>operational current at DC-13 <ul> <li>at 24 V rated value</li> <li>at 48 V rated value</li> <li>at 48 V rated value</li> <li>at 24 V rated value</li> <li>at 60 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> </ul> </li> </ul>	2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 1 A 0.15 A 10 A 2 A 1 A 0.15 A			
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> <li>operational current at DC-12 <ul> <li>at 24 V rated value</li> <li>at 48 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>at 48 V rated value</li> <li>at 48 V rated value</li> <li>at 24 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 120 V rated value</li> <li>at 220 V rated value</li> </ul></li></ul>	2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 1 A 0.15 A 10 A 2 A 1 A 0.15 A			
<ul> <li>at 500 V rated value         <ul> <li>at 690 V rated value</li> </ul> </li> <li>operational current at DC-12         <ul> <li>at 24 V rated value</li> <li>at 48 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> <li>at 220 V rated value</li> <li>at 24 V rated value</li> <li>at 220 V rated value</li> <li>at 24 V rated value</li> <li>at 20 V rated value</li> <li>at 10 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li></ul></li></ul>	2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 1 A 0.15 A 10 A 2 A 1 A 0.15 A 1 A 1 A 0.9 A 0.3 A 0.1 A 1 faulty switching per 100 million (17 V, 1 mA)			
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> <li>operational current at DC-12 <ul> <li>at 24 V rated value</li> <li>at 48 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> <li>at 24 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 420 V rated value</li> </ul></li></ul>	2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 1 A 0.15 A 10 A 2 A 1 A 0.9 A 0.3 A 0.1 A 1 faulty switching per 100 million (17 V, 1 mA) 34 A			
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> <li>operational current at DC-12 <ul> <li>at 24 V rated value</li> <li>at 48 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> <li>at 24 V rated value</li> <li>at 24 V rated value</li> <li>at 220 V rated value</li> <li>at 24 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 220 V rated value</li> <li>at 220 V rated value</li> <li>at 480 V rated value</li> <li>at 600 V rated value</li> </ul> </li> </ul>	2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 1 A 0.15 A 10 A 2 A 1 A 0.9 A 0.3 A 0.1 A 1 faulty switching per 100 million (17 V, 1 mA) 34 A			
<ul> <li>at 500 V rated value</li> <li>at 690 V rated value</li> <li>operational current at DC-12         <ul> <li>at 24 V rated value</li> <li>at 48 V rated value</li> <li>at 60 V rated value</li> <li>at 110 V rated value</li> <li>at 110 V rated value</li> <li>at 125 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>at 600 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> <li>at 24 V rated value</li> <li>at 60 V rated value</li> <li>at 60 V rated value</li> <li>at 60 V rated value</li> <li>at 10 V rated value</li> <li>at 10 V rated value</li> <li>at 10 V rated value</li> <li>at 220 V rated value</li> <li>at 220 V rated value</li> <li>at 600 V rated value</li> <li>at 480 V rated value</li> <li>at 480 V rated value</li> <li>at 600 V rated value</li></ul></li></ul>	2 A 1 A 10 A 6 A 6 A 3 A 2 A 1 A 0.15 A 10 A 2 A 1 A 0.15 A 10 A 2 A 1 A 0.9 A 0.3 A 0.1 A 1 faulty switching per 100 million (17 V, 1 mA) 34 A			

— at 230 V rated value	5 hp				
<ul> <li>for 3-phase AC motor</li> </ul>					
— 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>					
<ul> <li>— with type of coordination 1 required</li> </ul>	gG: 125A (690V,100kA), aM: 50A (690V,100kA), BS88: 125A (415V,80kA)				
<ul> <li>— with type of assignment 2 required</li> </ul>	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				
side-by-side mounting	Yes				
height	85 mm				
width	45 mm				
depth	97 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	Ring cable lug connection				
for auxiliary and control circuit	ring terminal lug connection				
at contactor for auxiliary contacts	Ring cable lug connection				
of magnet coil	Ring cable lug connection				
Safety related data					
product function					
mirror contact according to IEC 60947-4-1	Yes				
B10 value with high demand rate according to SN 31920	450 000				
proportion of dangerous failures					
with low demand rate according to SN 31920	40 %				
with high demand rate according to SN 31920	73 %				
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					
protection class IP on the front according to IEC 60529	IP00				
suitability for use					
<ul> <li>safety-related switching OFF</li> </ul>	Yes				
Certificates/ approvals					
General Product Approval					

	<u>Confirmation</u>	(U) II	KC	EHC		
Functional Safety/Safety of Ma- chinery	Declaration of Conformity	,	Test Certificates			
Type Examination Cer- tificate	CE EG-Konf.	UK CA	<u>Special Test Certific-</u> <u>ate</u>	<u>Type Test Certific-</u> ates/Test Report		
BUREAU VERITAS		Llovd's Register uis	PRS	RINA		
other			Railway	Environment		
<u>Confirmation</u>	UDE VDE	<u>Confirmation</u>	Vibration and Shock	Environmental Con- firmations		
Siemens has decided to exit the Russian market (see here). https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business Siemens is working on the renewal of the current EAC certificates. Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus). Information on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875 Information- and Downloadcenter (Catalogs, Brochures,) https://www.siemens.com/ic10 Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2028-4AK60						
	Functional Safety/Safety of Ma- chinery Type Examination Cer- tificate Type Examination Cer- tificate Confirmation Confirmation to ther Confirmation	Functional Safety/Safety of Ma- chinery       Declaration of Conformity         Type Examination Cer- tificate       EEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEE	Functional Safety/Safety of Ma- chinery       Declaration of Conformity         Type Examination Cer- tificate       Declaration of Conformity         Type Examination Cer- tificate       ECC         ECC       ECC         ECCC       ECC         ECC       ECC <td< td=""><td>Eurocional Safety/Safety of Ma- chinery       Declaration of Conformity       Test Certificates         Type Examination Cer- tificate       EEEE       Special Test Certificates         Event       EEEE       Special Test Certificates         Event       EVEN       EVEN         Event       EVEN       Event         Event       Event       Event         Event       Event</td></td<>	Eurocional Safety/Safety of Ma- chinery       Declaration of Conformity       Test Certificates         Type Examination Cer- tificate       EEEE       Special Test Certificates         Event       EEEE       Special Test Certificates         Event       EVEN       EVEN         Event       EVEN       Event         Event       Event       Event         Event       Event		

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2028-4AK60

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2028-

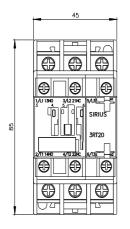
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2028-4AK60&lang=en

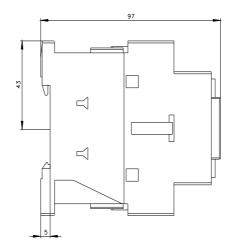
Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

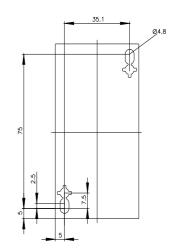
https://support.industry.siemens.com/cs/ww/en/ps/3RT2028-4AK60/char

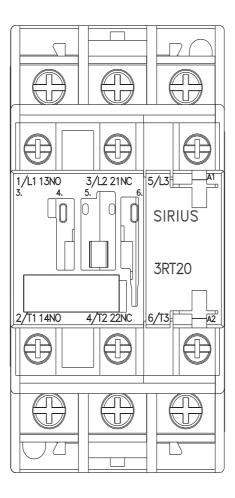
Further characteristics (e.g. electrical endurance, switching frequency)

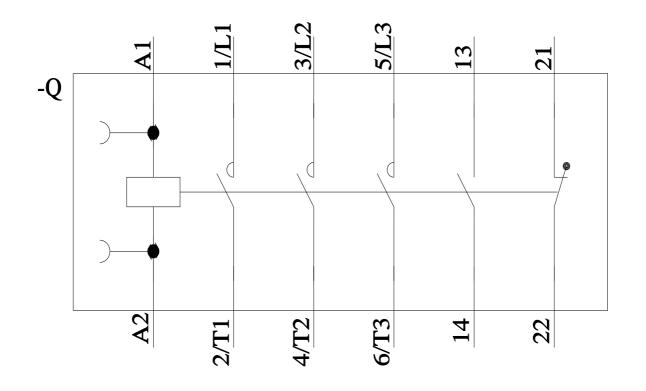
http://www.automation.siem ens.com/bilddb/index.aspx?view= . &mlft 











last modified:

2/10/2023 🖸