# SIEMENS

#### Data sheet

### 3RT2327-2AL20



contactor AC-1, 50 A, 400 V / 40 °C, 4-pole, 230 V AC, 50/60 Hz, auxiliary contacts: 1 NO + 1 NC, spring-loaded terminal, size: S0

product brand name	SIRIUS
product designation	Contactor
product type designation	3RT23
General technical data	
size of contactor	SO
product extension	
<ul> <li>function module for communication</li> </ul>	No
auxiliary switch	Yes
power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	12 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	3 W
insulation voltage	
<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	690 V
<ul> <li>of the auxiliary and control circuit with degree of pollution 3 rated value</li> </ul>	690 V
surge voltage resistance	
<ul> <li>of main circuit rated value</li> </ul>	6 kV
<ul> <li>of auxiliary circuit rated value</li> </ul>	6 kV
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)	
<ul> <li>of contactor typical</li> </ul>	10 000 000
<ul> <li>of the contactor with added auxiliary switch block typical</li> </ul>	10 000 000
reference code according to IEC 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	95 %
Main circuit	
number of poles for main current circuit	4
number of NO contacts for main contacts	4
operational current	
<ul> <li>at AC-1 at 400 V at ambient temperature 40 °C rated value</li> </ul>	50 A

•		
vulue         42.A	• at AC-1	50.4
value         value           - at 400 V roles value         155 A           - at 400 V roles value         155 A           momenum cross-section in main circuit at maximum AC-1 rated value         10 mm*           • at AC-4 at 400 V rated value         75 kW           • at AC-4 at 400 V rated value         75 kW           • at AC-4 at 400 V rated value         75 kW           • at AC-4 at 400 V rated value         75 kW           • at AC-4 at 400 V rated value         75 kW           • at AC-4 at 400 V rated value         10 mm*           • at AC-4 at 400 V rated value         10 mm*           • at AC-4 at 400 V rated value         10 mm*           • at AC-4 at 400 V rated value         10 mm*           • at AC-4 at 400 V rated value         10 mm*           • at AC b is switching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • at AC b is switching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • at AC b is switching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • at AC b is switching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • at AC b is switching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • at AC<		50 A
value         value           - = 44 00 V rated value         15.5 Å           - = 44 00 V rated value         15.5 Å           minimum cross-section in main scrul at maximum AC-1 rated value         10 mm²           • all AC-4 at 400 V rated value         7.5 kW           • all AC-4 at 400 V rated value         7.5 kW           • all AC-4 at 400 V rated value         7.5 kW           • finded to 15 so witching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • finded to 15 so witching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • finded to 15 so witching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • finded to 15 so witching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • finded to 15 so witching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • finded to 15 so witching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • finded to 16 so witching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • finded to fite duality         0 th the control supply voltage         AC           • fite of value         20.0 V         20.0 V           • at 60 Hz         0.8 11         0.8 11	— up to 690 V at ambient temperature 60 °C rated	42 A
− at 400 Vrated value     15.5 Å       retrieve     15.5 Å       retrieve     10 mm²       operating power     7.5 kW       • at AC-3 at 400 Vrated value     7.5 kW       • at AC-4 at 400 Vrated value     7.5 kW       • at AC-4 at 400 Vrated value     7.5 kW       • at AC-4 at 400 Vrated value     7.5 kW       • at AC-4 at 400 Vrated value     7.5 kW       • at AC-4 at 800 Vrated value     7.5 kW       • at AC-4 at 800 Vrated value     7.5 kW       • at AC-4 at 800 Vrated value     7.5 kW       • at AC-10 is switching at zero current maximum     Use minimum cross-section acc. to AC-1 rated value       • initied to 5 is switching at zero current maximum     Use minimum cross-section acc. to AC-1 rated value       • initied to 5 is switching at zero current maximum     Use minimum cross-section acc. to AC-1 rated value       • initied to 5 is switching at zero current maximum     Use minimum cross-section acc. to AC-1 rated value       • initied to 5 is switching at zero current maximum     Use minimum cross-section acc. to AC-1 rated value       • initied to 5 is switching at zero current maximum     Use minimum cross-section acc. to AC-1 rated value       • initied to 5 is switching at zero current maximum     Use minimum cross-section acc. to AC-1 rated value       • initied to 6 is switching at zero current maximum     Use minitum cross-secticon acc. to AC-1 rated value       • ot a		
••••••••••••••••••••••••••••••••••••	• at AC-3	
minimum cross-section in main circuit at maximum AC-1 rated value         10 mm²           operating power • at AC-3 at 400 V rated value         7.5 kW           • at AC-3 at 400 V rated value         7.5 kW           • at AC-3 at 400 V rated value         7.5 kW           • at AC-3 at 400 V rated value         7.5 kW           • at AC-3 at 400 V rated value         7.5 kW           • at AC-3 at 400 V rated value         7.5 kW           • initial to 5 is switching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • limited to 5 is switching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • limited to 5 is switching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • limited to 5 is switching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • limited to 5 is switching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • limited to 5 is switching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • at AC         5 600 fth         Cortor           • at AC	— at 400 V rated value	15.5 A
value         value         value           event ACS at 400 V rated value         7.5 kW           elor 41 AC 31 400 V rated value         7.5 kW           elor 41 AC 31 400 V rated value         7.5 kW           elor 41 AC 31 400 V rated value         7.5 kW           elor 41 AC 31 400 V rated value         7.5 kW           elor 41 AC 31 400 V rated value         0.5 kW           elor 41 AC 31 400 V rated value         0.5 kW           elor 41 AC 31 400 V rated value         0.5 kW           elor 41 AC 31 400 V rated value         0.5 kW           elor 41 AC 31 400 V rated value         0.5 kW           elor 41 AC 31 400 V rated value         0.5 kW           elor 41 AC 31 400 V rated value         0.5 kW           elor 41 AC 31 400 V rated value         0.5 kW           elor 42 AC 31 maximum         0.5 kW           centrol 41 50 kr 21 maximum         1000 1/h           centrol 41 50 kr 21 maximum         1000 1/h           centrol 41 50 kr 21 maximum         2.5 kW           elor 42 10 kr 21 maximum         2.5 kW           elor 10 kr 21 maximum         2.5 kW <td><ul> <li>at AC-4 at 400 V rated value</li> </ul></td> <td>15.5 A</td>	<ul> <li>at AC-4 at 400 V rated value</li> </ul>	15.5 A
operating power         7.5 kW           • af AC-3 at 400 V rated value         7.5 kW           • af AC-4 at 400 V rated value         7.5 kW           • infinited to 1 is witching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • limited to 10 is witching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • limited to 10 is witching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • limited to 30 is working at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • limited to 30 is working at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • limited to 30 is working at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           • at 60 tractor current maximum         Use minimum cross-section acc. to AC-1 rated value           • at 60 tractor current maximum         Use minimum cross-section acc. to AC-1 rated value           • at 60 tractor value         200 V           • at 60 tractor value         0.8 1.1           • at 60 tractor value         0.72           • at 60 tractor value         0.72		10 mm <sup>2</sup>
• at AC-3 at 400 V rated value       • at AC-4 at 400 V rated value       • at AC-4 at 400 V rated value       • at 400 V rated value       • at AC-4 at 400 V rat 400 V rated Value       • at AC-4 at 400 V raC		
• at AC-4 at 400 V rated value     7.5 kW       ehnet daw withstand current in cold operating state up to 0°C     0°C       • infield to 1 s witching at zero current maximum     Use minimum cross-section acc. to AC-1 rated value       • infield to 3 s witching at zero current maximum     Use minimum cross-section acc. to AC-1 rated value       • infield to 3 s witching at zero current maximum     Use minimum cross-section acc. to AC-1 rated value       • infield to 3 s witching at zero current maximum     Use minimum cross-section acc. to AC-1 rated value       • infield to 30 s witching at zero current maximum     Use minimum cross-section acc. to AC-1 rated value       • infield to 40 s witching at zero current maximum     Use minimum cross-section acc. to AC-1 rated value       • of 30 secting at zero current maximum     Use minimum cross-section acc. to AC-1 rated value       • of 30 strained value     200 V       • of 30 thz rated value     230 V       • of 30 thz rated value     230 V       • of 30 thz     0.811       • of 30 thz     0.811       • of 30 thz     0.811       • of 30 thz     0.72       • of 30 thz     0.72       • of 30 thz     0.72       • of 30 thz     0.74		
short-time withstand current in cold operating state up to 40°C         Use minimum cross-section acc. to AC-1 rated value           within the to 1 s withching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           within the to 3 s withching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           within the to 3 s withching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           within the to 3 s withching at zero current maximum         Use minimum cross-section acc. to AC-1 rated value           no-load switching frequency         stota           - stata         stota           - operating frequency at AC-1 maximum         1 000 f/h           - operating frequency at AC-1 maximum         1 000 f/h           - operating frequency at AC-1 maximum         1 000 f/h           - operating frequency at AC-1 maximum         2 30 V           - otto tage         AC           type of voltage of the control supply voltage         AC           control supply voltage rated value of magnet coil at AC         3 0 V           - otto Viz         0.8 - 1.1           - otto Viz		
40 *C     Initiation 1 is switching at zero current maximum     Use minimum cross-section acc. to AC-1 rated value       • initiate to 1 s switching at zero current maximum     Use minimum cross-section acc. to AC-1 rated value       • initiate to 3 s switching at zero current maximum     Use minimum cross-section acc. to AC-1 rated value       • initiate to 3 s switching at zero current maximum     Use minimum cross-section acc. to AC-1 rated value       • initiate to 3 switching at zero current maximum     Use minimum cross-section acc. to AC-1 rated value       • at AC     5000 1/h       operating frequency     AC       • at AC     5000 1/h       operating frequency     AC       • at 50 1/z crated value     230 V       • at 50 1/z     81 VA       • at 50 1/z     0.2		7.5 kW
elimited to 5 s switching at zero current maximum     Use minimum cross-section acc. to AC-1 rated value       elimited to 30 s switching at zero current maximum     Use minimum cross-section acc. to AC-1 rated value       minited to 30 s switching at zero current maximum     Use minimum cross-section acc. to AC-1 rated value       no-load switching frequency     5000 1/h       operating frequency at AC-1 maximum     1000 1/h       Control dicut Control     200 V       type of voltage of the control supply voltage     AC       control supply voltage at AC     200 V       • at 50 1/z rated value     200 V       • at 50 1/z     0.8 1.1       • at 50 1/z     0.8 1.1       • at 50 1/z     0.8 1.1       • at 50 1/z     0.7 Z       • at 50 1/z     10.5 V/A       • at 50 1/z     0.7 Z       • at 50 1/z     0.7 Z <t< td=""><td></td><td></td></t<>		
<ul> <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 30 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 30 s switching at zero current maximum</li> <li>limited to 30 s switching frequency</li> <li>et AC</li> <li>stAC</li> <li>source control supply voltage</li> <li>AC</li> <li>Control current dentation</li> <li>at 50 Hz</li> <li>at 60 Hz</li></ul>	<ul> <li>limited to 1 s switching at zero current maximum</li> </ul>	Use minimum cross-section acc. to AC-1 rated value
• limited to 30 s switching at zero current maximum     Use minimum cross-section acc. to AC-1 rated value       • at AC     5 000 1/h       • orbad switching frequency     5 000 1/h       • at AC     5 000 1/h       Operating frequency at AC-1 maximum     100 1/h       Control circuit Control     AC       Cype of voltage     AC       type of voltage     AC       • at 50 Hz rated value     230 V       • at 60 Hz     0.8 1.1       • at 60 Hz     0.8 1.1       • at 60 Hz     0.72       • at 60 Hz     0.72       • at 60 Hz     0.72       • at 60 Hz     0.74       • at 60 Hz     0.72       • at 60 Hz     0.74       • at 60 Hz     0.74       • at 60 Hz     0.72       • at 60 Hz     0.74       • at 60 Hz </td <td><ul> <li>limited to 5 s switching at zero current maximum</li> </ul></td> <td>Use minimum cross-section acc. to AC-1 rated value</td>	<ul> <li>limited to 5 s switching at zero current maximum</li> </ul>	Use minimum cross-section acc. to AC-1 rated value
• limited to 80 s witching frequency         Use minimum cross-section acc. to AC-1 rated value           • at AC         5 000 1/h           operating frequency at AC-1 maximum         1 000 1/h           Control circuit Control         4           type of voltage of the control supply voltage         AC           control supply voltage at AC         ast 80 Hz rated value           • at 80 Hz rated value         200 V           • at 80 Hz         0.8 1.1           • at 80 Hz         0.8 1.1           • at 80 Hz         0.8 1.1           • at 80 Hz         0.72           • at 80 Hz         0.74           • at 80 Hz         0.74           • at 80 Hz         0.74           • at 80 Hz         0.25           • at 80	<ul> <li>limited to 10 s switching at zero current maximum</li> </ul>	Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency     5 000 1/h       operating frequency at AC-1 maximum     1 000 1/h       Control circuit Control     1 000 1/h       Control circuit Control     AC       type of voltage of the control supply voltage     AC       control supply voltage at AC     200 V       • at 50 Hz rated value     230 V       • at 50 Hz rated value     230 V       • at 50 Hz     0.8 1.1       • at 50 Hz     0.72       • at 60 Hz     0.74       • at 60 Hz     0.74       • at 60 Hz     0.25       • at 60 Hz     0.26       • at 60 Hz	<ul> <li>limited to 30 s switching at zero current maximum</li> </ul>	Use minimum cross-section acc. to AC-1 rated value
• at AC     5 000 /h       operating frequency at AC-1 maximum     1 000 /h       Type of voltage     AC       type of voltage of the control supply voltage     AC       control size/five Voltage AC     230 V       • at 50 Hz rated value     230 V       operating range factor control supply voltage rated value OF     230 V       operating range factor control supply voltage rated value OF     0.8 1.1       • at 50 Hz     0.8 1.1       • at 60 Hz     0.72       • at 60 Hz     0.72       • at 60 Hz     0.74       apparent holding power of magnet coil at AC     8.5 VA       • at 60 Hz     0.25       • at 60 Hz     0.28       inductive power factor with the holding power of the coil     0.25       • at 60 Hz     0.28       iclosing delay     0.28       • at AC     4 16 ms       arcing time     10	<ul> <li>limited to 60 s switching at zero current maximum</li> </ul>	Use minimum cross-section acc. to AC-1 rated value
operating frequency at AC-1 maximum     1 000 1/h       Control circuit/ Control        type of voltage     AC       (ype of voltage of the control supply voltage     AC       control supply voltage at AC        • at 50 Hz rated value     230 V       • operating range factor control supply voltage rated value of magnet coil at AC     0.811       • at 50 Hz     0.8	no-load switching frequency	
Control circuit Control     AC       type of voltage     AC       control supply voltage of the control supply voltage     AC       e at 50 Hz rated value     230 V       operating range factor control supply voltage rated value of magnet coil at AC     0.8 1.1       • at 60 Hz     0.72       • at 60 Hz     0.74       • at 60 Hz     0.74       • at 60 Hz     0.26	• at AC	5 000 1/h
type of voltage         AC           type of voltage of the control supply voltage         AC           control supply voltage at AC         230 V           • at 50 Hz rated value         230 V           operating range factor control supply voltage rated value of         230 V           • at 50 Hz         0.8 1.1           apparent pick-up power of magnet coil at AC         0.8 1.1           apparent pick-up power of magnet coil at AC         81 VA           • at 60 Hz         0.72           inductive power factor with closing power of the coil         0.72           • at 60 Hz         0.72           inductive power factor with the lobling power of the coil         0.74           apparent holding power of magnet coil at AC         0.74           apparent holding power of magnet coil at AC         0.72           • at 60 Hz         0.74           apparent holding power of the coil         0.25           • at 60 Hz         0.25           inductive power factor with the holding power of the coil         0.26           • at 60 Hz         0.26           id ob Hz         0.25           • at 60 Hz         0.26           • at 60 Hz         0.28           closing delay         • at AC           • at	operating frequency at AC-1 maximum	1 000 1/h
Type of voltage of the control supply voltage at AC         AC           control supply voltage at AC         230 V           • at 50 Hz rated value         230 V           operating range factor control supply voltage rated value of magnet coil at AC         0.8 1.1           • at 60 Hz         0.8 1.1           apparent pick-up power of magnet coil at AC         0.8 1.1           • at 60 Hz         0.8 1.1           apparent pick-up power of magnet coil at AC         0.72           • at 60 Hz         0.72           inductive power factor with closing power of the coil         0.74           apparent pick power of magnet coil at AC         0.74           apparent pick power of magnet coil at AC         0.74           apparent holding power of magnet coil at AC         0.25           • at 60 Hz         0.26           • at 60 Hz         0.26           • at 60 Hz         0.26           • at 60 Hz         0.28           closing delay         • at AC           • at AC         10 10 ms	Control circuit/ Control	
type of voltage of the control supply voltage at AC         AC           control supply voltage at AC         230 V           • at 50 Hz rated value         230 V           operating range factor control supply voltage rated value of magnet coil at AC         08 1.1           • at 50 Hz         0.8 1.1           apparent pick-up power of magnet coil at AC         0.8 1.1           • at 50 Hz         0.8 1.1           apparent pick-up power of magnet coil at AC         0.72           • at 60 Hz         0.72           id 00 Hz         0.72           at 60 Hz         0.72           at 60 Hz         0.74           apparent pick ower of magnet coil at AC         0.74           at 60 Hz         0.74           apparent holding power of magnet coil at AC         0.25           • at 60 Hz         0.25           • at 60 Hz         0.25           • at 60 Hz         0.26           • at 60 Hz         0.28           closing delay         0.1.10 ms           • at AC         4 16 ms           opening delay         10 10 ms           • at AC         2           • at AC         1           • atachable         2           • a	type of voltage	AC
• at 50 Hz rated value     230 V       • at 60 Hz rated value     230 V       operating range factor control supply voltage rated value of magnet coil at AC     200 V       • at 50 Hz     0.8 1.1       apparent pick-up power of magnet coil at AC     0.8 1.1       • at 60 Hz     0.8 1.1       apparent pick-up power of magnet coil at AC     81 VA       • at 60 Hz     0.72       • at 60 Hz     0.72       • at 60 Hz     0.74       apparent holding power of magnet coil at AC     8 40       • at 60 Hz     0.72       • at 60 Hz     0.72       • at 60 Hz     0.74       apparent holding power of magnet coil at AC     8 40       • at 60 Hz     0.25       • at 60 Hz     0.25       • at 60 Hz     0.28       closing delay     0.28       • at AC     8 40 ms       • at AC     4 16 ms       • at AC     4 16 ms       • at AC     2 40 ms       • at AC     2 40 ms       • attachable     2       • instantaneous contact     1       • uttachable     2       • instantaneous contact     1       • instantaneous contact     1       • instantaneous contact     1       • instan	type of voltage of the control supply voltage	AC
• at 60 Hz rated value     230 V       operating range factor control supply voltage rated value of magnet coil at AC     0.8 1.1       • at 50 Hz     0.8 1.1       apparent pick-up power of magnet coil at AC     0.85 1.1       • at 60 Hz     81 VA       • at 60 Hz     79 VA       inductive power factor with closing power of the coil     0.72       • at 60 Hz     0.72       • at 60 Hz     0.74       apparent holding power of magnet coil at AC     0.74       • at 50 Hz     0.74       apparent holding power of magnet coil at AC     0.5 VA       • at 60 Hz     0.25       • at 60 Hz     0.25       • at 60 Hz     0.28       closing delay     0.28       • at 60 Hz     0.28       closing delay     0	control supply voltage at AC	
operating range factor control supply voltage rated value of magnet coil at AC         • at 50 HZ       0.8 1.1         • at 60 HZ       0.85 1.1         apparent pick-up power of magnet coil at AC       81 VA         • at 60 HZ       19 VA         inductive power factor with closing power of the coil       0.72         • at 50 HZ       0.74         apparent holding power of magnet coil at AC       0.74         apparent holding power of magnet coil at AC       0.74         apparent holding power of magnet coil at AC       0.74         at 60 HZ       0.74         apparent holding power of the coil       0.74         at 60 HZ       0.25         • at 60 HZ       0.26         closing dolay       0.28         • at 60 HZ       0.28         closing dolay       0.28         • at AC       8 40 ms         opening delay       0 10 ms         • at AC       4 16 ms         arcing time       10 10 ms         control version of the switch operating mechanism       Standard A1 - A2         Auxiliary circuit       1         number of NC contacts for auxiliary contacts       1         • instantaneous contact       1         • insta	• at 50 Hz rated value	230 V
magnet coll at AC       0.8 1.1         • at 50 Hz       0.8 1.1         apparent pick-up power of magnet coll at AC       81 VA         • at 60 Hz       79 VA         inductive power factor with closing power of the coll       0.72         • at 60 Hz       0.74         apparent holding power of magnet coll at AC       • at 60 Hz         • at 60 Hz       0.74         apparent holding power of magnet coll at AC       • at 60 Hz         • at 60 Hz       0.74         apparent holding power of magnet coll at AC       • at 60 Hz         • at 60 Hz       0.25         • at 60 Hz       0.26         • at 60 Hz       0.28         closing delay       • at 60 Hz         • at AC       8 40 ms         opening delay       • at AC         • at AC       4 16 ms         arcing time       10 10 ms         control version of the switch operating mechanism       Standard A1 - A2         Availary circuit       1         number of NC contacts for auxiliary contacts       1         • instantaneous contact       1	• at 60 Hz rated value	230 V
• at 50 Hz       0.8 1.1         • at 60 Hz       0.85 1.1         • at 50 Hz       0.85 1.1         • at 50 Hz       81 VA         • at 60 Hz       79 VA         Inductive power factor with closing power of the coil       79 VA         • at 60 Hz       0.72         • at 60 Hz       0.74         apparent holding power of magnet coil at AC       0.5 VA         • at 60 Hz       0.25         • at 60 Hz       0.25         • at 60 Hz       0.28         Inductive power factor with the holding power of the coil       0.25         • at 60 Hz       0.28         Inductive power factor with the holding power of the coil       0.42         • at 60 Hz       0.25         • at 60 Hz       0.28         closing delay       0.4	operating range factor control supply voltage rated value of	
• at 80 Hz       0.85 1.1         apparent pick-up power of magnet coil at AC       81 VA         • at 80 Hz       79 VA         inductive power factor with closing power of the coil       79 VA         • at 80 Hz       0.72         • at 80 Hz       0.74         apparent holding power of magnet coil at AC       0.74         • at 50 Hz       0.5 VA         • at 50 Hz       0.5 VA         • at 50 Hz       0.25         • at 60 Hz       0.25         • at 60 Hz       0.26         • at 60 Hz       0.28         closing delay       0.28         • at AC       8 40 ms         opening delay       0 10 ms         • at AC       4 16 ms         arcing time       10 10 ms         control version of the switch operating mechanism       Standard A1 - A2         Auxiliary circuit       1         number of NC contacts for auxiliary contacts       1         • instantaneous contact	magnet coil at AC	
apparent pick-up power of magnet coil at AC       81 VA         • at 50 Hz       81 VA         • at 60 Hz       79 VA         inductive power factor with closing power of the coil       0.72         • at 50 Hz       0.74         apparent holding power of magnet coil at AC       0.74         • at 50 Hz       0.74         apparent holding power of magnet coil at AC       0.74         • at 60 Hz       10.5 VA         • at 60 Hz       0.25         • at 60 Hz       0.26         closing delay       0.28         • at AC       8 40 ms         opening delay       0.4 16 ms         • at AC       4 16 ms         arcing time       10 10 ms         control version of the switch operating mechanism       Standard A1 - A2         Auxiliary circuit       1         number of NC contacts for auxiliary contacts       1         • attachable       2         • instantaneous contact       1         • attachable       2         • instantaneous contact       1         operational current at AC-15       1         • attachable       2         • instantaneous contact       1         • attachable	• at 50 Hz	0.8 1.1
• at 50 Hz       81 VA         • at 60 Hz       79 VA         inductive power factor with closing power of the coil       0.72         • at 50 Hz       0.72         • at 60 Hz       0.74         apparent holding power of magnet coil at AC       0.74         • at 50 Hz       0.74         • at 50 Hz       0.75         • at 50 Hz       0.74         • at 50 Hz       0.75         • at 50 Hz       0.25         • at 60 Hz       0.25         • at 60 Hz       0.25         • at 60 Hz       0.26         closing delay       0.28         closing delay       0.28         closing delay       0.28         opening delay       0.40 ms         • at AC       8 40 ms         opening delay       • at AC         • at AC       1 10 ms         control version of the switch operating mechanism       Standard A1 - A2         Auxillary circuit       1         number of NC contacts for auxillary contacts       1         • attachable       2         • instantaneous contact       1         • instantaneous contact       1         • instantaneous contact       1	• at 60 Hz	0.85 1.1
• at 60 Hz79 VAinductive power factor with closing power of the coll	apparent pick-up power of magnet coil at AC	
inductive power factor with closing power of the coll       0.72         • at 50 Hz       0.74         apparent holding power of magnet coil at AC       0.5 VA         • at 50 Hz       10.5 VA         • at 60 Hz       8.5 VA         Inductive power factor with the holding power of the coil       0.25         • at 60 Hz       0.26         • at 60 Hz       0.28         closing delay       0.28         • at AC       8 40 ms         opening delay       0         • at AC       4 16 ms         arcing time       10 10 ms         control version of the switch operating mechanism       Standard A1 - A2         Auxillary circuit       1         number of NC contacts for auxillary contacts       1         • attachable       2         • instantaneous contact       1         • attachable       2	● at 50 Hz	81 VA
• at 50 Hz0.72• at 60 Hz0.74apparent holding power of magnet coil at AC0.74• at 50 Hz10.5 VA• at 60 Hz8.5 VAinductive power factor with the holding power of the coil0.25• at 60 Hz0.28closing delay0.28• at AC8 40 ms• at AC8 40 msopening delay10 10 ms• at AC4 16 msarcing time10 10 mscontrol version of the switch operating mechanismStandard A1 - A2Auxiliary circuit1number of NC contacts for auxiliary contacts1• attachable2• instantaneous contact1operational current at AC-12 maximum10 Aoperational current at AC-1510 A• at 20 V rated value10 A		79 VA
• at 60 Hz0.74apparent holding power of magnet coil at AC10.5 VA• at 50 Hz10.5 VA• at 60 Hz8.5 VAinductive power factor with the holding power of the coil0.25• at 60 Hz0.25• at 60 Hz0.28closing delay0.28• at AC8 40 msopening delay10 16 ms• at AC4 16 msarcing time10 10 mscontrol version of the switch operating mechanismStandard A1 - A2Auxiliary circuit1number of NC contacts for auxiliary contacts1• attachable2• instantaneous contact1• instantaneous contact1• instantaneous contact1• operational current at AC-12 maximum10 Aoperational current at AC-1510 A• at 230 V rated value10 A		
apparent holding power of magnet coil at AC       10.5 VA         • at 50 Hz       10.5 VA         • at 60 Hz       8.5 VA         inductive power factor with the holding power of the coil		
• at 50 Hz10.5 VA• at 60 Hz8.5 VAinductive power factor with the holding power of the coil		0.74
• at 60 Hz8.5 VAinductive power factor with the holding power of the coll		
inductive power factor with the holding power of the coil       0.25         • at 50 Hz       0.28         closing delay       0.28         • at AC       8 40 ms         opening delay       4 16 ms         • at AC       4 16 ms         arcing time       10 10 ms         control version of the switch operating mechanism       Standard A1 - A2         Auxiliary circuit       2         number of NC contacts for auxiliary contacts       1         instantaneous contact       1         operational current at AC-12 maximum       10 A         operational current at AC-15       10 A	• at 50 Hz	10.5 VA
• at 50 Hz0.25• at 60 Hz0.28closing delay8 40 ms• at AC8 40 msopening delay		8.5 VA
• at 60 Hz       0.28         closing delay       8 40 ms         • 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       1         • attachable       2         • instantaneous contact       1         number of NO contacts for auxiliary contacts       1         • attachable       2         • instantaneous contact       1         operational current at AC-12 maximum       10 A         operational current at AC-15       -         • at 230 V rated value       10 A		
closing delay8 40 msopening delay4 16 ms• at AC4 16 msarcing time10 10 mscontrol version of the switch operating mechanismStandard A1 - A2Auxiliary circuit1number of NC contacts for auxiliary contacts1• attachable2• instantaneous contact1number of NO contacts for auxiliary contacts1• attachable2• instantaneous contact1operational current at AC-12 maximum10 Aoperational current at AC-1510 A• at 230 V rated value10 A		
• at AC8 40 msopening delay-• at AC4 16 msarcing time10 10 mscontrol version of the switch operating mechanismStandard A1 - A2Auxiliary circuit-number of NC contacts for auxiliary contacts1• attachable2• instantaneous contact1• attachable2• instantaneous contact1• attachable2• instantaneous contact1operational current at AC-12 maximum10 Aoperational current at AC-1510 A• at 230 V rated value10 A	• at 60 Hz	0.28
opening delay4 16 msarcing time10 10 mscontrol version of the switch operating mechanismStandard A1 - A2Auxiliary circuit1number of NC contacts for auxiliary contacts1• attachable2• instantaneous contact1number of NO contacts for auxiliary contacts1• attachable2• instantaneous contact1operational current at AC-12 maximum10 Aoperational current at AC-1510 A		
• at AC4 16 msarcing time10 10 mscontrol version of the switch operating mechanismStandard A1 - A2Auxiliary circuitInumber of NC contacts for auxiliary contacts1• attachable2• attachable1• attachable2• instantaneous contact1number of NO contacts for auxiliary contacts1• attachable2• instantaneous contact1operational current at AC-12 maximum10 Aoperational current at AC-1510 A	• at AC	8 40 ms
arcing time10 10 mscontrol version of the switch operating mechanismStandard A1 - A2Auxiliary circuitnumber of NC contacts for auxiliary contacts1e attachable2e instantaneous contact1number of NO contacts for auxiliary contacts1number of NO contacts for auxiliary contacts1e attachable2e instantaneous contact1operational current at AC-12 maximum10 Aoperational current at AC-1510 A		
control version of the switch operating mechanismStandard A1 - A2Auxiliary circuitInumber of NC contacts for auxiliary contacts1• attachable2• instantaneous contact1number of NO contacts for auxiliary contacts1• attachable2• instantaneous contact1• attachable2• attachable2• attachable1• attachable2• attachable1• attachable1• attachable1• attachable10 A• operational current at AC-1510 A• att 230 V rated value10 A		
Auxiliary circuit         number of NC contacts for auxiliary contacts       1         • attachable       2         • instantaneous contact       1         number of NO contacts for auxiliary contacts       1         • attachable       2         • attachable       1         • attachable       2         • instantaneous contact       1         operational current at AC-12 maximum       10 A         operational current at AC-15       10 A		
number of NC contacts for auxiliary contacts       1         • attachable       2         • instantaneous contact       1         number of NO contacts for auxiliary contacts       1         • attachable       2         • attachable       1         operational current at AC-12 maximum       10 A         operational current at AC-15       10 A		Standard A1 - A2
• attachable2• instantaneous contact1number of NO contacts for auxiliary contacts1• attachable2• instantaneous contact1operational current at AC-12 maximum10 Aoperational current at AC-1510 A		
• instantaneous contact1number of NO contacts for auxiliary contacts1• attachable2• instantaneous contact1operational current at AC-12 maximum10 Aoperational current at AC-1510 A	-	
number of NO contacts for auxiliary contacts1• attachable2• instantaneous contact1operational current at AC-12 maximum10 Aoperational current at AC-1510 A		
• attachable     2       • instantaneous contact     1       operational current at AC-12 maximum     10 A       operational current at AC-15     10 A		
• instantaneous contact       1         operational current at AC-12 maximum       10 A         operational current at AC-15       10 A         • at 230 V rated value       10 A	-	
operational current at AC-12 maximum     10 A       operational current at AC-15     10 A       • at 230 V rated value     10 A		
operational current at AC-15       • at 230 V rated value       10 A	instantaneous contact	1
• at 230 V rated value 10 A	operational current at AC-12 maximum	10 A
	operational current at AC-15	
• at 400 V rated value 3 A	• at 230 V rated value	10 A
	• at 400 V rated value	3 A

• at 500 V rated value	2 A			
• at 690 V rated value	1 A			
operational current at DC-12				
<ul> <li>at 24 V rated value</li> </ul>	10 A			
• at 48 V rated value	6 A			
• at 60 V rated value	6 A			
<ul> <li>at 110 V rated value</li> </ul>	3 A			
• at 125 V rated value	2 A			
at 220 V rated value	1 A			
• at 600 V rated value	0.15 A			
operational current at DC-13				
• at 24 V rated value	10 A			
• at 48 V rated value	2 A			
• at 110 V rated value	1 A			
• at 125 V rated value	0.9 A			
• at 220 V rated value	0.3 A			
• at 600 V rated value	0.1 A			
design of the miniature circuit breaker for short-circuit protection of the auxiliary switch required	gG: 10 A (230 V, 400 A)			
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)			
UL/CSA ratings				
contact rating of auxiliary contacts according to UL	A600 / Q600			
Short-circuit protection				
product function short circuit protection	No			
design of the fuse link				
for short-circuit protection of the main circuit				
- with type of coordination 1 required	gG: 63 A (690 V, 100 kA)			
— with type of assignment 2 required	gG: 20 A (690 V, 100 kA)			
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	gG: 10 A (690 V, 1 kA)			
Installation/ mounting/ dimensions				
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and			
	backward by +/- $22.5^{\circ}$ on vertical mounting surface			
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715			
<ul> <li>side-by-side mounting</li> </ul>	Yes			
height	102 mm			
width	60 mm			
depth	97 mm			
required spacing				
<ul> <li>with side-by-side mounting</li> </ul>				
— forwards	10 mm			
— upwards				
	10 mm			
— downwards	10 mm 10 mm			
— downwards — at the side				
	10 mm			
— at the side	10 mm			
<ul><li>— at the side</li><li> for grounded parts</li></ul>	10 mm 0 mm			
<ul> <li>— at the side</li> <li>for grounded parts</li> <li>— forwards</li> </ul>	10 mm 0 mm 10 mm			
<ul> <li>at the side</li> <li>for grounded parts</li> <li>forwards</li> <li>upwards</li> </ul>	10 mm 0 mm 10 mm 10 mm			
<ul> <li>at the side</li> <li>for grounded parts</li> <li>forwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> </ul>	10 mm 0 mm 10 mm 10 mm 6 mm			
<ul> <li>at the side</li> <li>for grounded parts</li> <li>forwards</li> <li>upwards</li> <li>at the side</li> </ul>	10 mm 0 mm 10 mm 10 mm 6 mm			
<ul> <li>at the side</li> <li>for grounded parts</li> <li>forwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> <li>for live parts</li> <li>forwards</li> </ul>	10 mm 0 mm 10 mm 10 mm 6 mm 10 mm			
<ul> <li>at the side</li> <li>for grounded parts</li> <li>forwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> <li>for live parts</li> <li>forwards</li> <li>upwards</li> </ul>	10 mm 0 mm 10 mm 10 mm 6 mm 10 mm 10 mm 10 mm			
<ul> <li>at the side</li> <li>for grounded parts</li> <li>forwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> <li>for live parts</li> <li>forwards</li> <li>upwards</li> <li>upwards</li> <li>downwards</li> </ul>	10 mm 0 mm 10 mm 10 mm 6 mm 10 mm 10 mm 10 mm 10 mm 10 mm			
<ul> <li>at the side</li> <li>for grounded parts</li> <li>forwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> <li>for live parts</li> <li>forwards</li> <li>upwards</li> <li>upwards</li> <li>at the side</li> <li>at the side</li> </ul>	10 mm 0 mm 10 mm 10 mm 6 mm 10 mm 10 mm 10 mm			
<ul> <li>at the side</li> <li>for grounded parts</li> <li>forwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> <li>for live parts</li> <li>forwards</li> <li>upwards</li> <li>upwards</li> <li>at the side</li> <li>at the side</li> </ul>	10 mm 0 mm 10 mm 10 mm 6 mm 10 mm 10 mm 10 mm 10 mm 10 mm			
<ul> <li>at the side</li> <li>for grounded parts</li> <li>forwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> <li>for live parts</li> <li>forwards</li> <li>upwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> <li>group at the side</li> </ul>	10 mm 0 mm 10 mm 10 mm 6 mm 10 mm 10 mm 10 mm 6 mm			
<ul> <li>at the side</li> <li>for grounded parts</li> <li>forwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> <li>for live parts</li> <li>for live parts</li> <li>forwards</li> <li>upwards</li> <li>upwards</li> <li>at the side</li> </ul> Connections/ Terminals type of electrical connection <ul> <li>for main current circuit</li> </ul>	10 mm 0 mm 10 mm 10 mm 6 mm 10 mm 10 mm 10 mm 10 mm 6 mm			
<ul> <li>at the side</li> <li>for grounded parts</li> <li>forwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> <li>for live parts</li> <li>forwards</li> <li>upwards</li> <li>upwards</li> <li>at the side</li> </ul> Connections/ Terminals type of electrical connection <ul> <li>for main current circuit</li> <li>for auxiliary and control circuit</li> </ul>	10 mm 0 mm 10 mm 10 mm 6 mm 10 mm 10 mm 10 mm 10 mm 6 mm 8 spring-loaded terminals spring-loaded terminals			
<ul> <li>at the side</li> <li>for grounded parts</li> <li>forwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> <li>for live parts</li> <li>forwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> </ul> Connections/ Terminals type of electrical connection <ul> <li>for main current circuit</li> <li>for auxiliary and control circuit</li> <li>at contactor for auxiliary contacts</li> </ul>	10 mm 0 mm 10 mm 10 mm 6 mm 10 mm 10 mm 10 mm 10 mm 6 mm 10 mm 5 pring-loaded terminals spring-loaded terminals spring-type terminals			
<ul> <li>at the side</li> <li>for grounded parts</li> <li>forwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> <li>for live parts</li> <li>for wards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> </ul> Connections/ Terminals type of electrical connection <ul> <li>for main current circuit</li> <li>for auxiliary and control circuit</li> <li>at contactor for auxiliary contacts</li> <li>of magnet coil</li> </ul>	10 mm 0 mm 10 mm 10 mm 6 mm 10 mm 10 mm 10 mm 10 mm 6 mm 8 spring-loaded terminals spring-loaded terminals			
<ul> <li>at the side</li> <li>for grounded parts</li> <li>forwards</li> <li>upwards</li> <li>at the side</li> <li>downwards</li> <li>for live parts</li> <li>forwards</li> <li>upwards</li> <li>downwards</li> <li>at the side</li> </ul> Connections/ Terminals type of electrical connection <ul> <li>for main current circuit</li> <li>for auxiliary and control circuit</li> <li>at contactor for auxiliary contacts</li> </ul>	10 mm 0 mm 10 mm 10 mm 6 mm 10 mm 10 mm 10 mm 10 mm 6 mm 10 mm 5 pring-loaded terminals spring-loaded terminals spring-type terminals			

<ul> <li>solid or stranded</li> </ul>			2x (1 10 mm²)				
<ul> <li>finely stranded w</li> </ul>	ith core end processing			2x (1 6 mm <sup>2</sup> )			
•	ithout core end processi	ng	2x (1 6 mm²)				
	or cross-section for ma	-	, ,				
<ul> <li>solid</li> </ul>			1 10 mm²				
<ul> <li>solid or stranded</li> </ul>			1 10 mm²				
<ul> <li>stranded</li> </ul>			1 10 mm²				
<ul> <li>finely stranded w</li> </ul>	ith core end processing		1 6 mm²				
•	ithout core end processi	ng	1 6 mm²				
,	or cross-section for aux	•					
<ul> <li>solid or stranded</li> </ul>		-	0.5 2.5 mm²				
<ul> <li>finely stranded w</li> </ul>	ith core end processing		0.5 1.5 mm²				
•	ithout core end processi	ng	0.5 2.5 mm²				
· · · · ·	onductor cross-section	-					
<ul> <li>for auxiliary containing</li> </ul>							
— solid			2x (0.5 2.5 mm²)	)			
— solid or stra	nded		2x (0.5 2.5 mm <sup>2</sup> )				
- finely strand	ded with core end proces	sing	2x (0.5 1.5 mm <sup>2</sup> )				
	ded without core end pro	-	2x (0.5 2.5 mm <sup>2</sup> )	<b>,</b>			
	or auxiliary contacts	0	2x (20 14)	/			
	d connectable conduct	or cross					
<ul> <li>for main contacts</li> </ul>	i		18 8				
<ul> <li>for auxiliary containing</li> </ul>			20 14				
Safety related data		· · · · · · · · · · · · · · · · · · ·					
product function							
•	cording to IEC 60947-4-	1	Yes				
	nterval or service life acc		20 a				
61508		-					
-	protection class IP on the front according to IEC 60529						
			finger-safe, for vert	tical contact f	rom the front		
Communication/ Protoc							
product function bus	communication		No				
Certificates/ approvals							
General Product App	roval					EMC	
(SP)	<u>Confirmation</u>			D	EHC	RCM	
Functional Safety/Safety of Ma- chinery	Declaration of Confo	ormity	Test Certif	ficates		Marine / Shipping	
Type Examination Cer- tificate	CE EG-Konf.	UK CA	<u>Type Test</u> ates/Test		Special Test Certific- ate	ABS	
Marine / Shipping							
BUREAU VERITAS		Llovd's Register uts	PR	5	RINA	KMRS	
other		Railway	Environme	ent			



Vibration and Shock

Environmental Confirmations

#### 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=3RT2327-2AL20

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2327-2AL20

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2327-2AL20

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

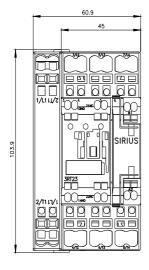
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2327-2AL20&lang=en

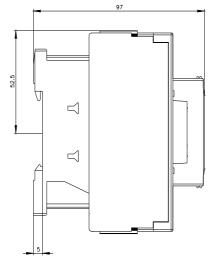
Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

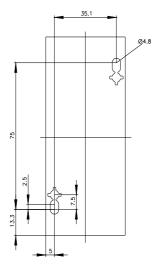
https://support.industry.siemens.com/cs/ww/en/ps/3RT2327-2AL20/char

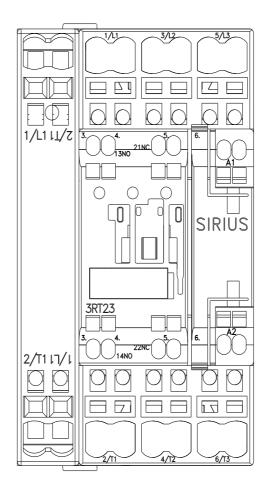
Further characteristics (e.g. electrical endurance, switching frequency)

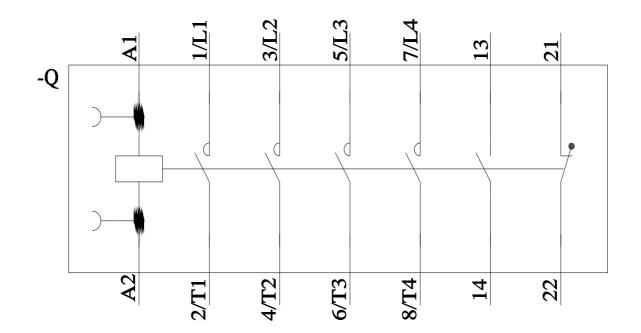
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2327-2AL20&objecttype=14&gridview=view1











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