## SIEMENS

## Data sheet

## 3RT2316-1AP00

4NO CONTACTOR, AC1: 18A AC 230V 50/60HZ 4-POLE, 4NO, SZ: S00, SCREW TERMINAL



product brandname	SIRIUS
Product designation	Contactor
Product type designation	3RT23

General technical data	
Size of contactor	S00
Product extension	
<ul> <li>function module for communication</li> </ul>	No
Auxiliary switch	Yes
Insulation voltage	
• rated value	690 V
Degree of pollution	3
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
<ul> <li>between coil and main contacts acc. to EN</li> </ul>	400 V
60947-1	
Protection class IP	
• on the front	IP20
• of the terminal	IP20
Shock resistance	

• at rectangular impulse	
— at AC	6,7g / 5 ms, 4,2g / 10 ms
• with sine pulse	
— at AC	10,5g / 5 ms, 6,6g / 10 ms
Mechanical service life (switching cycles)	
of contactor typical	30 000 000
of the contactor with added electronics-	5 000 000
<ul> <li>of the contactor with added electronics- compatible auxiliary switch block typical</li> </ul>	
<ul> <li>of the contactor with added auxiliary switch</li> </ul>	10 000 000
block typical	
Ambient conditions	
Installation altitude at height above sea level	2 000 m
maximum	
Ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +60 °C
<ul> <li>during storage</li> </ul>	-55 +80 °C
Main circuit	
Number of poles for main current circuit	4
Number of NO contacts for main contacts	4
Number of NC contacts for main contacts	0
Operating voltage	
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V
Operating current	
● at AC-1 at 400 V	
— at ambient temperature 40 °C rated value	18 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	18 A
— up to 690 V at ambient temperature 60 °C rated value	16 A
• at AC-2 at 400 V rated value	9 A
• at AC-3	
— at 400 V rated value	9 A
Connectable conductor cross-section in main circuit at AC-1	
• at 60 °C minimum permissible	2.5 mm <sup>2</sup>
• at 40 °C minimum permissible	2.5 mm <sup>2</sup>
Operating current	
• at 1 current path at DC-1	
<ul> <li>at 1 current path at DC-1</li> <li>— at 24 V rated value</li> </ul>	20 A
	20 A 2.1 A

	— at 440 V rated value	0.6 A
at 110 Vrated value12 A- at 220 Vrated value16 A- at 440 Vrated value0.8 A• with 3 current paths in series at DC-1 at 24 Vrated value20 A- at 110 Vrated value20 A- at 220 Vrated value16 A- at 220 Vrated value16 A- at 220 Vrated value16 A- at 24 Vrated value20 A- at 24 Vrated value16 A- at 24 Vrated value20 A- at 24 Vrated value20 A- at 24 Vrated value20 A- at 10 Vrated value20 A- at 110 Vrated value20 A- at 110 Vrated value0.35 A- at 110 Vrated value20 A- at 220 Vrated value1.5 A- at 240 Vrated value20 A- at 220 Vrated value5.5 KW- at 230 Vrated value6.5 KW- at 230 Vrated value6.5 KW- at 230 Vrated value10.5 KW- at 230 Vrated value10.5 KW- at 400 Vrated value10.5 KW- at 230 Vrated value10.5 KW- at 400 Vrated value10.5 KW- at 230 Vrated value10.6 KW-	<ul> <li>with 2 current paths in series at DC-1</li> </ul>	
at 220 V rated value1.6 A- at 240 V rated value0.8 A• with 3 current paths in series at DC-1 at 24 V rated value20 A- at 10 V rated value20 A- at 220 V rated value16 A- at 240 V rated value13 AOperating current20 A- at 10 V rated value20 A- at 110 V rated value20 A- at 124 V rated value20 A- at 24 V rated value20 A- at 250 V rated value1.5 A- at 260 V rated value0.2 AOperating power at 260 V rated value6 kW- at 270 V rated value10.5 kW- at 280 V rated value1.5 kW- at 280 V rated value1.5 kW- at 280 V rated value1.6 kW- at 280 V rated value1.6 kW- at 280 V rated value2.2 kW- at 280 V rated value1.6 kW- at 280 V rated value2.2 kW- at 280 V rated value2.2 kW- at 280 V rated value2.2 kW- at 280 V rated value1.6 kW-	— at 24 V rated value	20 A
Indext of the series at DC-10.8 Å- at 24 V rated value20 Å- at 110 V rated value20 Å- at 120 V rated value16 Å- at 24 V rated value1.3 ÅOperating current- at 20 V rated value0.1 Å- at 110 V rated value0.1 Å- at 110 V rated value0.35 Å- at 110 V rated value0.20 Å- at 220 V rated value1.5 Å- at 220 V rated value0.20 Å- at 220 V rated value0.20 Å- at 230 V rated value6.5 kW- at 230 V rated value6.5 kW- at 230 V rated value10.5 kW- at 400 V rated value10.5 kW- at 400 V rated value10.5 kW- at 230 V rated value8 kW- at 400 V rated value22 kW- at 400 V rated value22 kW- at 400 V rated value72 Å- at 400 V rated value70 V- at 400 V rated value70 V- at 400 V rated value<	— at 110 V rated value	12 A
with 3 current paths in series at DC-1- at 24 V rated value20 A- at 10 V rated value16 A- at 220 V rated value16 A- at 440 V rated value13 AOperating current- at 40 V rated value20 A- at 410 V rated value20 A- at 10 V rated value0.1 A- at 110 V rated value0.35 A- at 110 V rated value0.35 A- at 110 V rated value20 A- at 110 V rated value0.35 A- at 110 V rated value0.2 A- at 220 V rated value1.5 A- at 220 V rated value20 A- at 220 V rated value20 A- at 220 V rated value6.5 kW- at 220 V rated value1.5 A- at 230 V rated value6.5 kW- at 230 V rated value6.5 kW- at 230 V rated value1.5 kW- at 400 V rated value1.5 kW- at 400 V rated value6.5 kW- at 230 V rated value1.5 kW- at 230 V rated value1.5 kW- at 230 V rated value1.6 kW- at 400 V rated value1.8 kW- at 400 V rated value1.8 kW- at 400 V rated value1.8 kW- at 400 V rated value2.2 kW- at 400 V rated value4 kW- at 400 V rated value72 A- beorer loss [W] at AC-3 at 400 V for rated value72 A- beorer loss [W] at AC-3 at 400 V for rated value72 A- beorer loss [W] at AC-3 at 400 V for rated value10000 1/h- at	— at 220 V rated value	1.6 A
- at 24 V rated value20 A- at 110 V rated value20 A- at 220 V rated value16 A- at 240 V rated value1.3 AOperating current20 A- at 24 V rated value20 A- at 24 V rated value0.1 A• att 10 V rated value20 A- at 110 V rated value20 A- at 24 V rated value20 A- at 210 V rated value20 A- at 220 V rated value20 A- at 220 V rated value20 A- at 220 V rated value20 A- at 240 V rated value20 A- at 240 V rated value20 A- at 210 V rated value20 A- at 220 V rated value15 A- at 230 V rated value6 KW- at 230 V rated value6 KW- at 230 V rated value10.5 KW- at 230 V rated value10.5 KW- at 400 V rated value10.5 KW- at 400 V rated value18 KW- at 400 V rated value22 KW- at 400 V rated value20 K- at 400 V rated value10.5 KW- at 230 V rated value10.5 KW- at 400 V rated value10.5 KW- at 400 V rated value10.00 1/h <t< td=""><td>— at 440 V rated value</td><td>0.8 A</td></t<>	— at 440 V rated value	0.8 A
	<ul> <li>with 3 current paths in series at DC-1</li> </ul>	
International and the second	— at 24 V rated value	20 A
at 440 V rated value1.3 AOperating current	— at 110 V rated value	20 A
Operating current20 A- at 24 V rated value20 A- at 110 V rated value0.1 A• with 2 current paths in series at DC-3 at DC-5- at 110 V rated value- at 110 V rated value0.35 A- at 24 V rated value20 A- at 220 V rated value20 A- at 220 V rated value20 A- at 24 V rated value20 A- at 24 V rated value20 A- at 24 V rated value0.2 AOperating power0.2 A• at AC 16 kW- at 230 V rated value6.5 kW- at 230 V rated value10.5 kW- at 230 V rated value10.5 kW- at 400 V rated value2.2 kW- at 230 V rated value10.5 kW- at 230 V rated value10.7 kW- at 230 V rated value10.7 kW- at 230 V rated value2.2 kW- at 400 V rated value2.2 kW- at 400 V rated value10.7 kW- at 400 V rated value10.000 1/hOperating current per conductor10.000 1/h	— at 220 V rated value	16 A
<ul> <li>• at 1 current path at DC-3 at DC-5         <ul> <li>- at 24 V rated value</li> <li>- at 110 V rated value</li> <li>- at 24 V rated value</li> <li>- at 200 V rated value</li> <li>- at 24 V rated value</li> <li>- at 250 V rated value</li> <li>- at 260 °C rated value</li> <li>- at 260 °C rated value</li> <li>- at 250 V rated value</li> <li>-</li></ul></li></ul>	— at 440 V rated value	1.3 A
- at 24 V rated value20 A- at 110 V rated value0.1 A• with 2 current paths in series at DC-3 at DC-5 at 110 V rated value20 A- at 24 V rated value20 A• with 3 current paths in series at DC-3 at DC-5 at 24 V rated value20 A- at 220 V rated value20 A- at 220 V rated value20 A- at 24 V rated value6.5 kW- at 230 V rated value6.5 kW- at 230 V rated value6.5 kW- at 400 V rated value10.5 kW- at 400 V rated value10.5 kW- at 400 V rated value18 kW- at 400 V rated value4 kW• at AC-3 at 230 V rated value22 kW- at 230 V rated value4 kW• at AC-3 at 400 V rated value10.5 kW- at 230 V rated value10 kW• at AC-3 at 400 V rated value10 kW• at AC-3 at 400 V rated value10 kW• at AC-3 at 400 V rated value10 000 1/hPower loss [W] at AC-3 at 400 V rated value of the operating current per conductor10 000 1/hNo-load switching frequency • at AC-1 maximum1000 1/h	Operating current	
- at 110 V rated value0.1 A• with 2 current paths in series at DC-3 at DC-50.35 A- at 24 V rated value20 A• with 3 current paths in series at DC-3 at DC-520 A- at 220 V rated value20 A- at 220 V rated value20 A- at 220 V rated value20 A- at 24 V rated value20 A- at 24 V rated value20 A- at 24 V rated value0.2 AOperating power0.2 A• at AC-16.5 kW- at 230 V rated value6.5 kW- at 230 V rated value10.5 kW- at 400 V rated value11 kW- at 400 V rated value10.5 kW- at 690 V at 60 °C rated value18 kW• at AC-22.2 kW- at 230 V rated value72 APower loss [M] at AC-3 at 400 V for rated value of the operating current per conductor72 APower loss [M] at AC-3 at 400 V for rated value of the operating current per conductor72 APower loss [M] at AC-3 at 400 V for rated value of the operating current per conductor72 ANoload switching frequency • at AC10000 1/hOperating frequency • at AC-1 maximum1000 1/h	• at 1 current path at DC-3 at DC-5	
<ul> <li>with 2 current paths in series at DC-3 at DC-5         <ul> <li>at 110 V rated value</li> <li>20 A</li> </ul> </li> <li>at 24 V rated value</li> <li>20 A</li> <li>with 3 current paths in series at DC-3 at DC-5         <ul> <li>at 110 V rated value</li> <li>20 A</li> </ul> </li> <li>at 110 V rated value</li> <li>20 A</li> <li>at 220 V rated value</li> <li>20 A</li> <li>at 24 V rated value</li> <li>20 A</li> <li>at 220 V rated value</li> <li>at 24 V rated value</li> <li>at 440 V rated value</li> <li>20 A</li> <li>at 440 V rated value</li> <li>0.2 A</li> </ul> <li>Operating power</li> <li>at 230 V rated value</li> <li>6.5 kW</li> <li>at 230 V rated value</li> <li>6.5 kW</li> <li>at 230 V rated value</li> <li>6.5 kW</li> <li>at 230 V rated value</li> <li>11 kW</li> <li>at 400 V rated value</li> <li>12 kW</li> <li>at 400 V rated value</li> <li>at 600 V rated value</li> <li>at AC-1</li> <li>at 600 V rated value</li> <li>at AC-2 at 400 V rated value</li> <li>at AC-3</li> <li>at 400 V rated value</li> <li>at AC-3</li> <li>at 400 V rated value</li> <li>bi kW</li> <li>at AC-3 at 400 V for rated value</li> <li>class W</li> <li>at AC-3 at 400 V for rated value</li> <li>bi constring current per conductor</li> <li>Ac</li> <li>Dower loss [M] at AC-3 at 400 V for rated value of the operating current per conductor</li> <li>Ac</li> <li>Dower loss [M] at AC-3 at 400 V for rated value of the operating current per conductor</li> <li>Ac</li> <li>Dower loss [M] at AC-3 at 400 V for rated value of the operating current per conductor</li> <li>Ac</li> <li>Dower loss [M] at AC-3 at 400 V for rated value of the operating current per conductor</li> <li>Ac</li> <li>Di cond r/h</li>	— at 24 V rated value	20 A
- at 110 V rated value0.35 Å- at 24 V rated value20 Å• with 3 current paths in series at DC-3 at DC-5 at 110 V rated value20 Å- at 220 V rated value1.5 Å- at 24 V rated value0.2 Å- at 440 V rated value0.2 ÅOperating power at 230 V rated value6.5 kW- at 230 V rated value6 kW- at 400 V rated value11 kW- at 400 V rated value10.5 kW- at 400 V rated value18 kW- at 400 V rated value18 kW- at 690 V rated value22 kW- at 400 V rated value0.7 W- at 400 V rated value72 Å- at 230 V rated value72 Å- at 400 V rated value10.5 kW- at 400 V rated value10.5 kW- at 400 V rated value10.7 kW- at 400 V rated value72 Å- at 400 V rated value72 Å- at 400 V rated value72 Å- at 400 V rated value of10 000 1/h- at AC10 000 1/hOperating frequency1000 1/h	— at 110 V rated value	0.1 A
- at 24 V rated value20 A• with 3 current paths in series at DC-3 at DC-520 A- at 110 V rated value20 A- at 220 V rated value20 A- at 24 V rated value20 A- at 24 V rated value0.2 AOperating power-• at AC-1 at 230 V rated value6.5 kW- at 230 V rated value6.5 kW- at 230 V rated value6.5 kW- at 400 V rated value10.5 kW- at 400 V rated value10.5 kW- at 400 V rated value18 kW• at AC-2 at 400 V rated value4 kW• at AC-3 at 230 V rated value2.2 kW- at 400 V rated value2.2 kW• at AC-3 at 230 V rated value72 APower loss [W] at AC-3 at 400 V for rated value of the operating current per conductor72 ANo-load switching frequency-• at AC10 000 1/hOperating frequency1000 1/h	<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>	
<ul> <li>with 3 current paths in series at DC-3 at DC-5         <ul> <li>at 110 V rated value</li> <li>at 220 V rated value</li> <li>at 220 V rated value</li> <li>at 24 V rated value</li> <li>at 24 V rated value</li> <li>at 440 V rated value</li> <li>20 A</li> </ul> </li> <li>at 440 V rated value</li> <li>20 A</li> <li>at 440 V rated value</li> <li>0.2 A</li> <li>Operating power</li> <li>at AC-1</li> <li>at AC-1</li> <li>at 230 V rated value</li> <li>6.5 kW</li> <li>at 230 V rated value</li> <li>6.5 kW</li> <li>at 400 V rated value</li> <li>6.5 kW</li> <li>at 400 V rated value</li> <li>10.5 kW</li> <li>at 60° C rated value</li> <li>10.5 kW</li> <li>at 60° C rated value</li> <li>10.5 kW</li> <li>at 60° C rated value</li> <li>10.5 kW</li> <li>at 60° V rated value</li> <li>4 kW</li> <li>at AC-3</li> <li>at AC-3</li> <li>at AC-3</li> <li>At AC-3</li> <li>At 00 V rated value</li> <li>4 kW</li> <li>At AC-3</li> <li>At 00 V for rated value of the operating current limited to 10 s</li> <li>72 A</li> <li>Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor</li> <li>No-load switching frequency</li> <li>at AC</li> <li>t AC</li> <li>10 000 1/h</li> </ul>	— at 110 V rated value	0.35 A
- at 110 V rated value20 A- at 220 V rated value1.5 A- at 24 V rated value20 A- at 440 V rated value0.2 AOperating power at 230 V rated value6.5 kW- at 230 V rated value6.5 kW- at 230 V rated value6 kW- at 230 V rated value11 kW- at 400 V rated value10.5 kW- at 400 V rated value18 kW- at 230 V rated value2.2 kW- at 230 V rated value4 kW- at 230 V rated value2.2 kW- at 400 V rated value72 A- at 400 V rated value0.7 W- at 400 V for rated value10 000 1/h- at AC-3- 10 000 1/h	— at 24 V rated value	20 A
	<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul>	
- at 24 V rated value20 A- at 440 V rated value0.2 AOperating power at AC-1 at 230 V rated value6.5 kW- at 230 V rated value6.5 kW- at 230 V rated value11 kW- at 400 V rated value10.5 kW- at 400 V rated value10.5 kW- at 400 V rated value18 kW- at 400 V rated value2.2 kW- at 400 V rated value2.2 kW- at 230 V rated value2.2 kW- at 230 V rated value72 AThermal short-time current limited to 10 s72 APower loss [W] at AC-3 at 400 V for rated value of the operating frequency • at AC10 000 1/hOperating frequency • at AC-1 maximum1000 1/h	— at 110 V rated value	20 A
Instruction0.2 AOperating power • at AC-1 at 230 V rated value6.5 kW- at 230 V rated value6 kW- at 230 V rated value11 kW- at 400 V rated value10.5 kW- at 400 V rated value10.5 kW- at 690 V at 60 °C rated value18 kW- at 690 V at 60 °C rated value18 kW- at 230 V rated value2.2 kW- at 230 V rated value4 kW• at AC-3 at 230 V rated value0.7 W- at 230 V rated value10 000 1/hOperating frequency • at AC-1 maximum1000 1/h	— at 220 V rated value	1.5 A
Operating power• at AC-1- at 230 V rated value- at 400 V rated value- at 690 V at 60 °C rated value- at 690 V at 60 °C rated value- at 690 V at 60 °C rated value- at 230 V rated value- at 400 V rated value<	— at 24 V rated value	20 A
• at AC-16.5 kW- at 230 V rated value6.5 kW- at 230 V at 60 °C rated value6 kW- at 400 V rated value11 kW- at 400 V at 60 °C rated value10.5 kW- at 690 V at 60 °C rated value18 kW- at 690 V at 60 °C rated value18 kW- at 230 V rated value2.2 kW- at 230 V rated value4 kW- at 230 V rated value2.2 kW- at 400 V rated value4 kW- at 230 V rated value0.7 WThermal short-time current limited to 10 s72 APower loss [W] at AC-3 at 400 V for rated value of the operating current per conductor0.7 WNo-load switching frequency • at AC10 000 1/hOperating frequency • at AC-1 maximum1 000 1/h	— at 440 V rated value	0.2 A
- at 230 V rated value6.5 kW- at 230 V at 60 °C rated value6 kW- at 400 V rated value11 kW- at 400 V at 60 °C rated value10.5 kW- at 690 V at 60 °C rated value18 kW- at 690 V at 60 °C rated value2 kW- at 690 V rated value2.2 kW- at 230 V rated value2.2 kW- at 230 V rated value72 A- at 400 V rated value0.7 WNo-load switching frequency • at AC-1 maximum10 000 1/h	Operating power	
- at 230 V at 60 °C rated value6 kW- at 400 V rated value11 kW- at 400 V at 60 °C rated value10.5 kW- at 690 V at 60 °C rated value18 kW• at AC-2 at 400 V rated value4 kW• at AC-3 at 230 V rated value2.2 kW- at 400 V rated value4 kW• at AO V rated value72 APower loss [W] at AC-3 at 400 V for rated value of the operating current per conductor0.7 WNo-load switching frequency • at AC10 000 1/hOperating frequency • at AC-1 maximum1 000 1/h	● at AC-1	
- at 400 V rated value11 kW- at 400 V at 60 °C rated value10.5 kW- at 690 V at 60 °C rated value18 kW- at 690 V at 60 °C rated value4 kW• at AC-2 at 400 V rated value4 kW• at AC-3 at 230 V rated value2.2 kW- at 400 V rated value4 kWThermal short-time current limited to 10 s72 APower loss [W] at AC-3 at 400 V for rated value of the operating current per conductor0.7 WNo-load switching frequency • at AC10 000 1/hOperating frequency • at AC-1 maximum1 000 1/h	— at 230 V rated value	6.5 kW
- at 400 V at 60 °C rated value10.5 kW- at 690 V at 60 °C rated value18 kW• at AC-2 at 400 V rated value4 kW• at AC-32.2 kW- at 230 V rated value4 kW- at 400 V rated value4 kW- at 400 V rated value0.7 kWThermal short-time current limited to 10 s72 APower loss [W] at AC-3 at 400 V for rated value of the operating current per conductor0.7 WNo-load switching frequency • at AC10 000 1/hOperating frequency • at AC-1 maximum1 000 1/h	— at 230 V at 60 °C rated value	6 kW
- at 690 V at 60 °C rated value18 kW• at AC-2 at 400 V rated value4 kW• at AC-32.2 kW- at 230 V rated value4 kW- at 400 V rated value72 APower loss [W] at AC-3 at 400 V for rated value of the operating current per conductor0.7 WNo-load switching frequency • at AC10 000 1/hOperating frequency • at AC-1 maximum1 000 1/h	— at 400 V rated value	11 kW
• at AC-2 at 400 V rated value4 kW• at AC-3 at 230 V rated value2.2 kW- at 400 V rated value4 kWThermal short-time current limited to 10 s72 APower loss [W] at AC-3 at 400 V for rated value of the operating current per conductor0.7 WNo-load switching frequency • at AC10 000 1/hOperating frequency • at AC-1 maximum1 000 1/h	— at 400 V at 60 °C rated value	10.5 kW
• at AC-32.2 kW- at 230 V rated value2.2 kW- at 400 V rated value4 kWThermal short-time current limited to 10 s72 APower loss [W] at AC-3 at 400 V for rated value of the operating current per conductor0.7 WNo-load switching frequency • at AC10 000 1/hOperating frequency • at AC-1 maximum1 000 1/h	— at 690 V at 60 °C rated value	18 kW
- at 230 V rated value2.2 kW- at 400 V rated value4 kWThermal short-time current limited to 10 s72 APower loss [W] at AC-3 at 400 V for rated value of the operating current per conductor0.7 WNo-load switching frequency • at AC10 000 1/hOperating frequency • at AC-1 maximum1000 1/h	• at AC-2 at 400 V rated value	4 kW
	● at AC-3	
Thermal short-time current limited to 10 s72 APower loss [W] at AC-3 at 400 V for rated value of the operating current per conductor0.7 WNo-load switching frequency • at AC10 000 1/hOperating frequency • at AC-1 maximum1 000 1/h	— at 230 V rated value	2.2 kW
Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor0.7 WNo-load switching frequency • at AC10 000 1/hOperating frequency • at AC-1 maximum1 000 1/h	— at 400 V rated value	4 kW
the operating current per conductorImage: conductorNo-load switching frequency • at AC10 000 1/hOperating frequency • at AC-1 maximum1 000 1/h	Thermal short-time current limited to 10 s	72 A
No-load switching frequency     10 000 1/h       • at AC     10 000 1/h       Operating frequency     1 000 1/h       • at AC-1 maximum     1 000 1/h		0.7 W
• at AC     10 000 1/h       Operating frequency     1 000 1/h       • at AC-1 maximum     1 000 1/h		
Operating frequency     1 000 1/h		10,000,1/b
• at AC-1 maximum 1 000 1/h		10 000 1/h
		1 000 1/b
• at AG-2 maximum 750 1/n		
	• at AC-2 maximum	750 1/11

● at AC-3 maximum	750 1/h
	250 1/h
• at AC-4 maximum	250 1/11
Control circuit/ Control	
Type of voltage of the control supply voltage	AC
Control supply voltage at 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	
● at 50 Hz	0.8 1.1
• at 60 Hz	0.85 1.1
Apparent pick-up power of magnet coil at AC	
● at 50 Hz	27 V·A
• at 60 Hz	31.7 V·A
Inductive power factor with closing power of the coil	
• at 50 Hz	0.8
• at 60 Hz	0.81
Apparent holding power of magnet coil at AC	
• at 50 Hz	4.2 V·A
• at 60 Hz	4.8 V·A
Inductive power factor with the holding power of the coil	
• at 50 Hz	0.25
• at 60 Hz	0.25
Closing delay	
• at AC	9 35 ms
Opening delay	
• at AC	3.5 14 ms
Arcing time	10 15 ms
Auxiliary circuit	
Number of NC contacts	
<ul> <li>for auxiliary contacts</li> </ul>	
— instantaneous contact	0
Number of NO contacts	
<ul> <li>for auxiliary contacts</li> </ul>	
— instantaneous contact	0
Contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	
Full-load current (FLA) for three-phase AC motor	
• at 480 V rated value	7.6 A
<ul> <li>at 600 V rated value</li> </ul>	9 A

Yielded mechanical performance [hp]				
<ul> <li>for single-phase AC motor</li> </ul>				
— at 110/120 V rated value	0.33 hp			
— at 230 V rated value	1 hp			
<ul> <li>for three-phase AC motor</li> </ul>				
— at 200/208 V rated value	2 hp			
— at 220/230 V rated value	3 hp			
— at 460/480 V rated value	5 hp			
— at 575/600 V rated value	7.5 hp			
Short-circuit protection				
Design of the fuse link				
<ul> <li>for short-circuit protection of the main circuit</li> </ul>				
— with type of coordination 1 required	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 35 A			
<ul> <li>— with type of assignment 2 required</li> </ul>	gG NH 3NA, DIAZED 5SB, NEOZED 5SE: 20 A			
<ul> <li>for short-circuit protection of the auxiliary switch</li> </ul>	fuse gG: 10 A			
required				
nstallation/ mounting/ dimensions				
Mounting position	+/-180° rotation possible on vertical mounting surface; can be			
	tilted forward and backward by +/- 22.5° on vertical mounting surface			
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail			
	according to DIN EN 50022			
<ul> <li>Side-by-side mounting</li> </ul>	Yes			
Height	58 mm			
Width	45 mm			
Depth	73 mm			
Required spacing				
<ul> <li>with side-by-side mounting</li> </ul>				
— forwards	0 mm			
— Backwards	0 mm			
— upwards	0 mm			
— downwards	0 mm			
— at the side	0 mm			
<ul> <li>for grounded parts</li> </ul>				
— forwards	0 mm			
— Backwards	0 mm			
— upwards	0 mm			
	6 mm			
— at the side				
— at the side — downwards	0 mm			
	0 mm			

— Backwards	0 mm		
— upwards	0 mm		
— downwards	0 mm		
— at the side	6 mm		
Connections/Terminals			
Type of electrical connection			
• for main current circuit	screw-type terminals		
<ul> <li>for auxiliary and control current circuit</li> </ul>	screw-type terminals		
Type of connectable conductor cross-sections			
for main contacts			
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²		
— single or multi-stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x 4 mm²		
— finely stranded with core end processing	2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> )		
at AWG conductors for main contacts	2x (20 16), 2x (18 14), 2x 12		
Type of connectable conductor cross-sections			
for auxiliary contacts			
— single or multi-stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x 4 mm²		
— finely stranded with core end processing	2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2.5 mm <sup>2</sup> )		
at AWG conductors for auxiliary contacts	2x (20 16), 2x (18 14), 2x 12		
Safety related data			
B10 value			
• with high demand rate acc. to SN 31920	1 000 000		
Proportion of dangerous failures			
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	40 %		
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	73 %		
Failure rate [FIT]			
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	100 FIT		
Product function			
<ul> <li>Mirror contact acc. to IEC 60947-4-1</li> </ul>	Yes; with 3RH29		
T1 value for proof test interval or service life acc. to IEC 61508	20 у		
Protection against electrical shock	finger-safe		
Certificates/approvals			

General Product	Approval			Functional Safety/Safety of Machinery	Declaration of Conformity
CCC	CSA		EHC	Baumusterbescheini gung	EG-Konf.
Test Certificates		Shipping Appro	val		
spezielle Prüfbescheinigunge <u>n</u>	Typprüfbescheinigu ng/Werkszeugnis	ABS	B U R E A U VERITAS	GL GL	Lloyd's Register LRS
Shipping Approv	al		other		
PRS	RINA	RMRS	Bestätigungen	Umweltbestätigung	

Further information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

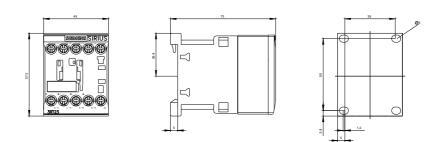
Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT2316-1AP00

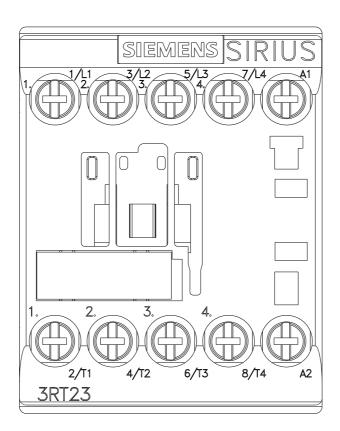
Cax online generator

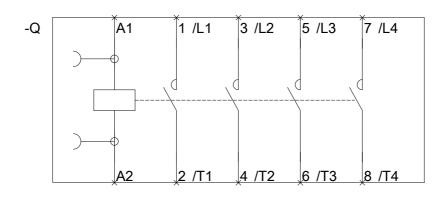
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2316-1AP00

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT2316-1AP00

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2316-1AP00&lang=en







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