# **SIEMENS**

Data sheet 3RT2023-1KB40

COUPLING CONTACTOR, AC-3, 4KW/400V, 1NO+1NC, 24 V DC, W. INTEGRATED VARISTOR 3-POLE, SIZE S0 SCREW TERMINALS SUITABLE FOR PLC OUTPUTS



product brandname	SIRIUS
Product designation	Coupling relay
General technical data	
Size of contactor	S0
Product extension	
• function module for communication	No
Auxiliary switch	No

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 ID	

• on the front	IP20
of the terminal	IP20

Shock	c res	istar	ice	

Insulation voltage

• rated value

• at rectangular impulse

— at DC	10g / 5 ms, 7,5g / 10 ms
• with sine pulse	
— at DC	15g / 5 ms, 10g / 10 ms
Mechanical service life (switching cycles)	
of contactor typical	10 000 000
<ul> <li>of the contactor with added electronics- compatible auxiliary switch block typical</li> </ul>	5 000 000
<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	2 000 m		
maximum Archiochtoropacture			
Ambient temperature			
<ul><li>during operation</li></ul>	-25 +60 °C		
<ul><li>during operation Note</li></ul>	Railway application: -40 70 °C with 10 mm clearance. See		
	catalog for other rated conditions		
<ul><li>during storage</li></ul>	-55 +80 °C		

Main circuit	
Number of poles for main current circuit	3
Number of NO contacts for main contacts	3
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	40 A
• at AC-1	
— up to 690 V at ambient temperature 40 $^{\circ}\text{C}$ rated value	40 A
— up to 690 V at ambient temperature 60 $^{\circ}\text{C}$ rated value	35 A
• at AC-2 at 400 V rated value	9 A
• at AC-3	
— at 400 V rated value	9 A
— at 500 V rated value	9 A
— at 690 V rated value	9 A
Connectable conductor cross-section in main circuit at AC-1	
• at 60 °C minimum permissible	10 mm²
• at 40 °C minimum permissible	10 mm²
Operating current for approx. 200000 operating cycles at AC-4	

• at 400 V rated value	4.1 A
• at 690 V rated value	3.3 A
Operating current	
• at 1 current path at DC-1	
— at 24 V rated value	35 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 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
• with 3 current paths in series at DC-1	
— at 24 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
Operating current	
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	20 A
— at 110 V rated value	2.5 A
— at 220 V rated value	1 A
— at 440 V rated value	0.09 A
— at 600 V rated value	0.06 A
• with 2 current paths in series at DC-3 at DC-5	
— at 110 V rated value	15 A
— at 220 V rated value	3 A
— at 24 V rated value	35 A
— at 440 V rated value	0.27 A
— at 600 V rated value	0.16 A
• with 3 current paths in series at DC-3 at DC-5	
— at 110 V rated value	35 A
— at 220 V rated value	10 A
— at 24 V rated value	35 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.6 A

at 230 V rated value     at 230 V rated value     at 400 V rated value     at 690 V rated value     at AC-2 at 400 V rated value     at AC-3     at 230 V rated value     at AC-3     at 230 V rated value     at 900 V rated value     2 kW     at 400 V rated value     2 kW     at 400 V rated value     2 kW     at 690 V rated value     2 kW     at 400 V rated value     3 kB A  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency     at DC     1 500 1/h  Operating frequency     at AC-1 maximum     1 000 1/h     at AC-3 maximum     1 000 1/h     at AC-3 maximum     at AC-4 maximum     300 1/h  Control circuit/ Control  Type of voltage of the control supply voltage     DC  Control proper of magnet coil at DC      Are at DC  Opening delay     at DC  Opening delay     at DC  Aroling time      13.3 kW      4 kW  AkW  AkW  AkW  AkW  AkW  AkW  AkW		
at 230 V at 60 °C rated value 23 kW — at 400 V rated value — at 400 V rated value 23 kW — at 400 V at 60 °C rated value 40 kW — at 690 V rated value 4 kW — at AC-2 at 400 V rated value 4 kW — at AC-3 — at 230 V rated value 7.5 kW — at 400 V rated value 7.5 kW — at 400 V rated value 7.5 kW — at 690 V rated value 8.5 kW — at 690 V rated value 9.2 kW — at 690 V rated value 9.2 kW — at 690 V rated value 9.3 kW — at 690 V rated value 9.4 kW — at 690 V rated value 9.5 kW — at 200 V rated va		
- at 400 V rated value	V rated value 13.3	N
	V at 60 °C rated value 13.3	N
at 690 V rated value	V rated value 23 k	
at 690 V at 60 °C rated value 4 kW  • at AC-2 at 400 V rated value 4 kW  • at AC-3 at 230 V rated value 2.2 kW  at 400 V rated value 7.5 kW  Operating power for approx. 200000 operating cycles at AC-4  • at 400 V rated value 2 kW  • at 690 V rated value 2.5 kW  Thermal short-time current limited to 10 s 80 A  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency  • at DC 1 500 1/h  Operating frequency  • at AC-4 maximum 1 000 1/h  • at AC-3 maximum 1 000 1/h  • at AC-3 maximum 300 1/h  Control circuit/ Control  Type of voltage of the control supply voltage DC  Control supply voltage at DC  • rated value  Operating range factor control supply voltage rated value of magnet coil at DC  Design of the surge suppressor with varistor  Closing power of magnet coil at DC  Opening delay  • at DC  Opening delay  • at DC  Opening delay  • at DC  Arcing time 1000000000000000000000000000000000000	V at 60 °C rated value 23 k	
at AC-2 at 400 V rated value at AC-3  — at 230 V rated value — at 400 V rated value — at 690 V rated value — at 690 V rated value  • at 400 V rated value  • at 400 V rated value  • at 690 V rated value  • at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency • at DC  • at AC-1 maximum  • at AC-2 maximum  • at AC-2 maximum  • at AC-3 maximum • at AC-4 maximum  • at AC-4 maximum  • at AC-4 maximum  • at AC-4 maximum  • at AC-4 maximum  • at AC-4 maximum  • at AC-4 maximum  • at AC-4 maximum  • at AC-4 maximum  • at AC-5 maximum • at AC-6 walue  Control circuit/ Control  Type of voltage of the control supply voltage  Control supply voltage at DC  • rated value  Operating range factor control supply voltage rated value of magnet coil at DC  Design of the surge suppressor  with varistor  Closing power of magnet coil at DC  Holding power of magnet coil at DC  Closing delay  • at DC  Opening delay  • at DC  Arcing time    4 kW   4 kW   4 kW  4 kW  4 kW  5 kW  5 kW  5 kW  5 kW  5 kW  6 kB C  6 7 kB C  7 kB C  8 kB C	V rated value 40 k	
at AC-3  — at 230 V rated value  — at 400 V rated value  — at 690 V rated value  At 400 V rated value  2.2 kW  Operating power for approx. 200000 operating cycles at AC-4  at 400 V rated value  2 kW  at 690 V rated value  2 kW  at 690 V rated value  2.5 kW  Thermal short-time current limited to 10 s  80 A  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency  at DC  1 500 1/h  1 500 1/h  1 000 1/h  at AC-2 maximum  1 000 1/h  at AC-3 maximum  1 000 1/h  at AC-4 maximum  1 000 1/h  at AC-4 maximum  1 000 1/h  at AC-4 maximum  24 V  Operating range factor control supply voltage  Control supply voltage at DC  areade value  value of magnet coil at DC  Design of the surge suppressor  with varistor  Closing power of magnet coil at DC  Holding power of magnet coil at DC  Closing delay  at DC  Value of magnet coil at DC  Depanding delay  at DC  Openating delay  at DC  Aroing time  10 10 ms	V at 60 °C rated value 40 k	
at 230 V rated value	00 V rated value 4 kV	
— at 400 V rated value — at 690 V rated value 7.5 kW  Operating power for approx. 200000 operating cycles at AC-4  • at 400 V rated value 2 kW • at 690 V rated value 2.5 kW  Thermal short-time current limited to 10 s 80 A  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency • at DC  Operating frequency • at AC-1 maximum 1 000 1/h • at AC-2 maximum 1 000 1/h • at AC-4 maximum 300 1/h  Control circuit/ Control  Type of voltage of the control supply voltage Control supply voltage at DC • rated value  Operating range factor control supply voltage rated value of magnet coil at DC  Design of the surge suppressor  Closing power of magnet coil at DC  Holding power of magnet coil at DC  Opering delay • at DC  Opening delay • at DC  Arcing time  10 10 ms		
— at 690 V rated value  Operating power for approx. 200000 operating cycles at AC-4  • at 400 V rated value  • at 690 V rated value  • at 690 V rated value  2 kW  Thermal short-time current limited to 10 s  80 A  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency  • at DC  1 500 1/h  Operating frequency  • at AC-1 maximum  1 000 1/h  • at AC-2 maximum  1 000 1/h  • at AC-3 maximum  • at AC-4 maximum  1 000 1/h  • at AC-4 maximum  2 Volume of voltage of the control supply voltage  Control supply voltage at DC  • rated value  Operating range factor control supply voltage rated value of magnet coil at DC  Design of the surge suppressor  Closing power of magnet coil at DC  Ventrol direction of magnet coil at DC  Holding power of magnet coil at DC  Closing delay  • at DC  Opering delay  • at DC  Arcing time  7.5 kW	V rated value 2.2	1
Operating power for approx. 200000 operating cycles at AC-4  • at 400 V rated value • at 690 V rated value 2 kW  Thermal short-time current limited to 10 s Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor No-load switching frequency • at DC  Operating frequency • at AC-1 maximum 1 000 1/h • at AC-2 maximum 1 000 1/h • at AC-3 maximum 1 000 1/h • at AC-4 maximum 300 1/h  Control circuit/ Control  Type of voltage of the control supply voltage Control supply voltage at DC • rated value Operating range factor control supply voltage rated value of magnet coil at DC Design of the surge suppressor Closing power of magnet coil at DC  Losing power of magnet coil at DC Opening delay • at DC  Type of voltage at DC  15 17.5 ms  Arcing time  2 kW  0	V rated value 4 kV	
at AC-4  • at 400 V rated value • at 690 V rated value 2 kW  • at 690 V rated value 2.5 kW  Thermal short-time current limited to 10 s Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency • at DC  Operating frequency • at AC-1 maximum 1 000 1/h • at AC-2 maximum 1 000 1/h • at AC-3 maximum 1 000 1/h • at AC-4 maximum 300 1/h  Control circuit/ Control  Type of voltage of the control supply voltage Control supply voltage at DC • rated value  Operating range factor control supply voltage rated value of magnet coil at DC  Design of the surge suppressor  Closing power of magnet coil at DC  Losing power of magnet coil at DC  Coloring delay • at DC  Opening delay • at DC  Arcing time  2 kW  0 AV	V rated value 7.5	1
at 690 V rated value  Thermal short-time current limited to 10 s  Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency  at DC  1 500 1/h  Operating frequency  at AC-1 maximum  1 000 1/h  at AC-2 maximum  1 000 1/h  at AC-3 maximum  1 000 1/h  at AC-4 maximum  1 000 1/h  control circuit/ Control  Type of voltage of the control supply voltage  Control supply voltage at DC  a rated value  Operating range factor control supply voltage rated value of magnet coil at DC  Design of the surge suppressor  Closing power of magnet coil at DC  Holding power of magnet coil at DC  Coloning delay  at DC  Opening delay  at DC  Aroing time  2.5 kW  O.4 W  O.4 W  O.5 W  O.5 W  O.5 W  O.6 W  O.7 1.25  Opening delay  at DC  Opening delay  at DC  Opening time  10 10 ms	for approx. 200000 operating cycles	
Thermal short-time current limited to 10 s Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency • at DC  Operating frequency • at AC-1 maximum 1 000 1/h • at AC-2 maximum 1 000 1/h • at AC-3 maximum 1 000 1/h • at AC-4 maximum 300 1/h  Control circuit/ Control  Type of voltage of the control supply voltage  Control supply voltage at DC • rated value  Operating range factor control supply voltage rated value of magnet coil at DC  Design of the surge suppressor  Closing power of magnet coil at DC  Holding power of magnet coil at DC  Closing delay • at DC  Opening delay • at DC  Arong time  No 4.5 m  15 17.5 ms  Arong time  Arong time  Arong time	ed value 2 kV	
Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor  No-load switching frequency  • at DC  Operating frequency  • at AC-1 maximum  • at AC-2 maximum  • at AC-3 maximum  • at AC-4 maximum  • at AC-9 the control supply voltage  Control circuit/ Control  Type of voltage of the control supply voltage  Control supply voltage at DC  • rated value  Operating range factor control supply voltage rated value of magnet coil at DC  Design of the surge suppressor  Closing power of magnet coil at DC  Holding power of magnet coil at DC  Closing delay  • at DC  Opening delay  • at DC  Arcing time  0.4 W  1 500 1/h  1 500 1/h  1 000 1/h  1 000 1/h  1 000 1/h  1 0.4 V  1 000 1/h	ed value 2.5	
the operating current per conductor  No-load switching frequency  • at DC  Operating frequency  • at AC-1 maximum  • at AC-2 maximum  • at AC-3 maximum  • at AC-4 maximum  Out 1/h  • at AC-4 maximum  Type of voltage of the control supply voltage  Control supply voltage at DC  • rated value  Operating range factor control supply voltage rated value of magnet coil at DC  Design of the surge suppressor  Closing power of magnet coil at DC  Holding power of magnet coil at DC  Closing delay  • at DC  Opening delay  • at DC  Aroing time  1 5 17.5 ms  Arcing time	e current limited to 10 s	
No-load switching frequency  • at DC  Operating frequency  • at AC-1 maximum  • at AC-2 maximum  • at AC-3 maximum  • at AC-3 maximum  • at AC-4 maximum  • at AC-4 maximum  • at AC-4 maximum  Control circuit/ Control  Type of voltage of the control supply voltage  Control supply voltage at DC  • rated value  • rated value  Operating range factor control supply voltage rated value of magnet coil at DC  Design of the surge suppressor  Closing power of magnet coil at DC  Holding power of magnet coil at DC  Closing delay  • at DC  Opening delay  • at DC  Arcing time  1 500 1/h  1 000 1/h  1	AC-3 at 400 V for rated value of 0.4	
at DC  Operating frequency  at AC-1 maximum  at AC-2 maximum  at AC-3 maximum  at AC-3 maximum  at AC-4 maximum  at AC-4 maximum  Type of voltage of the control supply voltage  Control supply voltage at DC  aread value  Prated value  Operating range factor control supply voltage rated value of magnet coil at DC  Design of the surge suppressor  Closing power of magnet coil at DC  Holding power of magnet coil at DC  Closing delay  at DC  Opening delay  at DC  Type of voltage of the control supply voltage at DC  Type of voltage of the control supply voltage at DC  At S W  Closing delay  at DC  Type of voltage of the control supply voltage at DC  Type of voltage of the control supply voltage at DC  Type of voltage of the control supply voltage  Type of voltage of the control supply voltage of the control supply voltage  Type of voltage of the control supply voltage of the control supply voltage of the contro		
Operating frequency  • at AC-1 maximum  • at AC-2 maximum  • at AC-3 maximum  • at AC-4 maximum  • at AC-4 maximum  • at AC-4 maximum  Toon 1/h  • at AC-4 maximum  • at AC-4 maximum  Outline  Type of voltage of the control supply voltage  Control supply voltage at DC  • rated value  Operating range factor control supply voltage rated value of magnet coil at DC  Design of the surge suppressor  Closing power of magnet coil at DC  Holding power of magnet coil at DC  Closing delay  • at DC  Opening delay  • at DC  Arcing time  1 0.00 1/h  1 0.0		
<ul> <li>at AC-1 maximum</li> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> <li>at AC-4 maximum</li> <li>300 1/h</li> </ul> Control circuit/ Control Type of voltage of the control supply voltage <ul> <li>Control supply voltage at DC</li> <li>rated value</li> <li>at AC-4 maximum</li> </ul> Operating range factor control supply voltage rated value of magnet coil at DC <ul> <li>Design of the surge suppressor</li> <li>Closing power of magnet coil at DC</li> <li>4.5 W</li> </ul> Holding power of magnet coil at DC <ul> <li>4.5 W</li> </ul> Closing delay <ul> <li>at DC</li> <li>50 170 ms</li> </ul> Opening delay <ul> <li>at DC</li> <li>15 17.5 ms</li> </ul> Arcing time <ul> <li>10 10 ms</li> </ul>		1/h
<ul> <li>at AC-2 maximum</li> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> <li>300 1/h</li> </ul> Control circuit/ Control Type of voltage of the control supply voltage <ul> <li>Control supply voltage at DC</li> <li>rated value</li> <li>24 V</li> </ul> Operating range factor control supply voltage rated value of magnet coil at DC <ul> <li>Design of the surge suppressor</li> <li>With varistor</li> </ul> Closing power of magnet coil at DC <ul> <li>4.5 W</li> </ul> Holding power of magnet coil at DC <ul> <li>4.5 W</li> </ul> Closing delay <ul> <li>at DC</li> <li>50 170 ms</li> </ul> Opening delay <ul> <li>at DC</li> <li>15 17.5 ms</li> </ul> Arcing time <ul> <li>10 10 ms</li> </ul>		
<ul> <li>at AC-3 maximum</li> <li>at AC-4 maximum</li> <li>300 1/h</li> </ul> Control circuit/ Control Type of voltage of the control supply voltage <ul> <li>Control supply voltage at DC</li> <li>rated value</li> <li>24 V</li> </ul> Operating range factor control supply voltage rated value of magnet coil at DC Design of the surge suppressor <ul> <li>with varistor</li> </ul> Closing power of magnet coil at DC <ul> <li>4.5 W</li> </ul> Closing delay <ul> <li>at DC</li> <li>50 170 ms</li> </ul> Opening delay <ul> <li>at DC</li> <li>15 17.5 ms</li> </ul> Arcing time <ul> <li>10 10 ms</li> </ul>	Millani	
at AC-4 maximum  Ontrol circuit/ Control  Type of voltage of the control supply voltage  Control supply voltage at DC  at at action of rated value  Operating range factor control supply voltage rated value of magnet coil at DC  Design of the surge suppressor  Closing power of magnet coil at DC  Holding power of magnet coil at DC  Closing delay  at DC  Opening delay  at DC  Arcing time  300 1/h	ximum 1 00	1/h
Control circuit/ Control  Type of voltage of the control supply voltage  Control supply voltage at DC  • rated value  Operating range factor control supply voltage rated value of magnet coil at DC  Design of the surge suppressor  Closing power of magnet coil at DC  Holding power of magnet coil at DC  Closing delay  • at DC  Opening delay  • at DC  Arcing time  OC  OC  OC  OC  OC  OC  OC  OC  OC  O	ximum 1 00	1/h
Type of voltage of the control supply voltage  Control supply voltage at DC  • rated value  Operating range factor control supply voltage rated value of magnet coil at DC  Design of the surge suppressor  Closing power of magnet coil at DC  Holding power of magnet coil at DC  Closing delay  • at DC  Opening delay  • at DC  Arcing time  DC  24 V  0.7 1.25  with varistor  4.5 W  4.5 W  50 170 ms	ximum 300	ו
Control supply voltage at DC  • rated value  Operating range factor control supply voltage rated value of magnet coil at DC  Design of the surge suppressor  Closing power of magnet coil at DC  Holding power of magnet coil at DC  4.5 W  Closing delay • at DC  Opening delay • at DC  Arcing time  24 V  0.7 1.25  with varistor  4.5 W  50 170 ms	ontrol	
<ul> <li>● rated value</li> <li>Operating range factor control supply voltage rated value of magnet coil at DC</li> <li>Design of the surge suppressor</li> <li>Closing power of magnet coil at DC</li> <li>Holding power of magnet coil at DC</li> <li>Closing delay</li> <li>● at DC</li> <li>Opening delay</li> <li>● at DC</li> <li>Arcing time</li> <li>24 V</li> <li>0.7 1.25</li> <li>with varistor</li> <li>4.5 W</li> <li>4.5 W</li> <li>50 170 ms</li> <li>15 17.5 ms</li> <li>10 10 ms</li> </ul>	f the control supply voltage DC	
Operating range factor control supply voltage rated value of magnet coil at DC  Design of the surge suppressor with varistor  Closing power of magnet coil at DC 4.5 W  Holding power of magnet coil at DC 4.5 W  Closing delay  • at DC 50 170 ms  Opening delay  • at DC 15 17.5 ms  Arcing time 10 10 ms	Itage at DC	
value of magnet coil at DC  Design of the surge suppressor  Closing power of magnet coil at DC  Holding power of magnet coil at DC  4.5 W  Closing delay  • at DC  Opening delay  • at DC  15 17.5 ms  Arcing time  with varistor  4.5 W  5.5 W  1.5 W  1.5 W  1.7 M ms	24 \	
Closing power of magnet coil at DC  Holding power of magnet coil at DC  4.5 W  Closing delay  • at DC  50 170 ms  Opening delay  • at DC  15 17.5 ms  Arcing time  10 10 ms		1.25
Holding power of magnet coil at DC  4.5 W  Closing delay  • at DC  50 170 ms  Opening delay  • at DC  15 17.5 ms  Arcing time  10 10 ms	ge suppressor with	ristor
Closing delay <ul> <li>at DC</li> <li>50 170 ms</li> </ul> Opening delay <ul> <li>at DC</li> <li>15 17.5 ms</li> <li>Arcing time</li> <li>10 10 ms</li> </ul>	magnet coil at DC 4.5	
● at DC 50 170 ms  Opening delay  ● at DC 15 17.5 ms  Arcing time 10 10 ms	magnet coil at DC 4.5	
Opening delay         15 17.5 ms           Arcing time         10 10 ms		
● at DC 15 17.5 ms  Arcing time 10 10 ms	50 .	70 ms
Arcing time 10 10 ms		
<u> </u>		
		0 ms
Residual current of the electronics for control with signal <0>	of the electronics for control with	

• at AC at 230 V maximum permissible	6 mA
• at DC at 24 V maximum permissible	16 mA

Auxiliary circuit	
Number of NC contacts	
<ul> <li>for auxiliary contacts</li> </ul>	
<ul> <li>instantaneous contact</li> </ul>	1
Number of NO contacts	
<ul> <li>for auxiliary contacts</li> </ul>	
— instantaneous contact	1
Operating current at AC-12 maximum	10 A
Operating current at AC-15	
• at 230 V rated value	10 A
• at 400 V rated value	3 A
• at 500 V rated value	2 A
● at 690 V rated value	1 A
Operating current at DC-12	
• at 24 V rated value	10 A
• at 48 V rated value	6 A
• at 60 V rated value	6 A
• at 110 V rated value	3 A
• at 125 V rated value	2 A
• at 220 V rated value	1 A
• at 600 V rated value	0.15 A
Operating current at DC-13	
• at 24 V rated value	10 A
• at 48 V rated value	2 A
• at 60 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
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
• at 600 V rated value	9 A
Yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V rated value	1 hp
— at 230 V rated value	1 hp
• for three-phase AC motor	

<ul> <li>at 200/208 V rated value</li> </ul>	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
Contact rating of auxiliary contacts according to UL	A600 / Q600

#### Short-circuit protection

### Design of the fuse link

- for short-circuit protection of the main circuit
  - with type of coordination 1 required
  - with type of assignment 2 required
- for short-circuit protection of the auxiliary switch required

gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 63 A gL/gG LV HRC 3NA, DIAZED 5SB, NEOZED 5SE: 25 A fuse gL/gG: 10 A

Mounting position	+/-180° rotation possible on vertical mounting surface; can be
ouriung pooluori	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	85 mm
Width	45 mm
Depth	107 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
• for grounded parts	
— forwards	0 mm
— Backwards	0 mm
— upwards	0 mm
— at the side	6 mm
— downwards	0 mm
• for live parts	
— forwards	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 (1 2.5 mm²), 2x (2.5 10 mm²)
<ul> <li>single or multi-stranded</li> </ul>	2x (1 2,5 mm²), 2x (2,5 10 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
<ul> <li>at AWG conductors for main contacts</li> </ul>	2x (16 12), 2x (14 8)
Type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
<ul> <li>single or multi-stranded</li> </ul>	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
• at AWG conductors for auxiliary contacts	2x (20 16), 2x (18 14)

Safety related data	
B10 value	
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	1 000 000
Proportion of dangerous failures	
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	40 %
• with high demand rate acc. to SN 31920	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
T1 value for proof test interval or service life acc. to	20 y
IEC 61508	
Protection against electrical shock	finger-safe

# Certificates/approvals

### **General Product Approval**







KTL





**EMC** 

Functional
Safety/Safety
of Machinery

Declaration of Conformity

Test Certificates

Shipping Approval

Baumusterbescheini gung



spezielle Prüfbescheinigunge n Typprüfbescheinigu ng/Werkszeugnis





## **Shipping Approval**





GL



LRS







#### other

Umweltbestätigung

Bestätigungen



#### Further informatior

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=3RT2023-1KB40

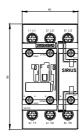
Cax online generator

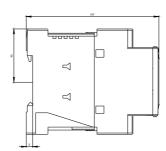
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2023-1KB40

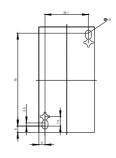
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

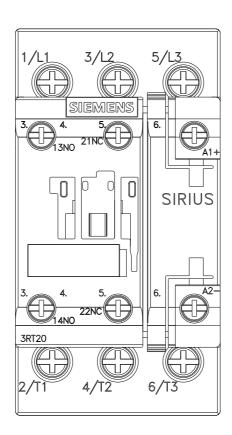
https://support.industry.siemens.com/cs/ww/en/ps/3RT2023-1KB40

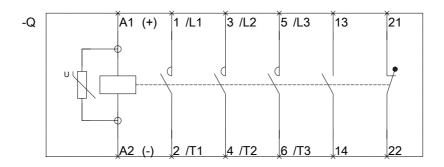
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2023-1KB40&lang=en











**last modified:** 10/19/2016

