## **SIEMENS**

Data sheet 3RT2023-2AC20



power contactor, AC-3e/AC-3, 9 A, 4 kW / 400 V, 3-pole, 24 V AC, 50/60 Hz, auxiliary contacts: 1 NO + 1 NC, spring-loaded terminal, size: S0  $\,$ 

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT2
General technical data	
size of contactor	S0
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>	0.6 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	0.2 W
without load current share typical	2 W
type of calculation of power loss depending on pole	quadratic
insulation voltage	
<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	690 V
<ul> <li>of auxiliary 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
of auxiliary circuit rated value	6 kV
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	400 V
shock resistance at rectangular impulse	
• at AC	7,5g / 5 ms, 4,7g / 10 ms
shock resistance with sine pulse	
• at AC	11,8g / 5 ms, 7,4g / 10 ms
mechanical service life (operating cycles)	
<ul> <li>of contactor typical</li> </ul>	10 000 000
<ul> <li>of the contactor with added electronically optimized auxiliary switch block typical</li> </ul>	5 000 000
of the contactor with added auxiliary switch block typical	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
Weight	0.44 kg
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 %

Environmental footprint	
Environmental Product Declaration(EPD)	Yes
Global Warming Potential [CO2 eg] total	74.2 kg
Global Warming Potential [CO2 eq] during manufacturing	1.9 kg
Global Warming Potential [CO2 eq] during mandacturing	72.4 kg
Global Warming Potential [CO2 eq] after end of life	-0.117 kg
Main circuit	0.111 Ng
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
at AC-3 rated value maximum	690 V
at AC-3e rated value maximum	690 V
operational current	
<ul> <li>at AC-1 at 400 V at ambient temperature 40 °C rated value</li> </ul>	40 A
<ul> <li>at AC-1         — up to 690 V at ambient temperature 40 °C rated value     </li> </ul>	40 A
— up to 690 V at ambient temperature 60 °C rated value	35 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
• at AC-3e	
— at 400 V rated value	9 A
— at 500 V rated value	9 A
— at 690 V rated value	9 A
<ul> <li>at AC-4 at 400 V rated value</li> </ul>	8.5 A
<ul> <li>at AC-5a up to 690 V rated value</li> </ul>	35.2 A
• at AC-5b up to 400 V rated value	7.4 A
• at AC-6a	
— up to 230 V for current peak value n=20 rated value	11.4 A
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	11.4 A
<ul> <li>up to 500 V for current peak value n=20 rated value</li> </ul>	9.1 A
<ul><li>— up to 690 V for current peak value n=20 rated value</li><li>at AC-6a</li></ul>	9 A
<ul> <li>up to 230 V for current peak value n=30 rated value</li> </ul>	7.6 A
<ul> <li>up to 400 V for current peak value n=30 rated value</li> </ul>	7.6 A
<ul> <li>up to 500 V for current peak value n=30 rated value</li> </ul>	6.1 A
— up to 690 V for current peak value n=30 rated value	6.1 A
minimum cross-section in main circuit at maximum AC-1 rated value	10 mm²
operational current for approx. 200000 operating cycles at AC-4	
at 400 V rated value	4.1 A
at 690 V rated value	3.3 A
operational current	
at 1 current path at DC-1     at 24 V reted value.	25 A
— at 24 V rated value	35 A 20 A
<ul><li>— at 60 V rated value</li><li>— at 110 V rated value</li></ul>	4.5 A
— at 110 v rated value  — at 220 V rated value	4.5 A
— at 440 V rated value	0.4 A
— at 440 V rated value  — at 600 V rated value	0.4 A 0.25 A
with 2 current paths in series at DC-1	0.2011
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	5 A
— at 440 V rated value	1A
— at 600 V rated value	0.8 A
at 555 V rated Value	5.5.1

with 3 current paths in series at DC-1	
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	35 A
— at 440 V rated value	2.9 A
— at 600 V rated value	1.4 A
• at 1 current path at DC-3 at DC-5	1.7 //
— at 24 V rated value	20 A
— at 60 V rated value	5 A
— at 220 V rated value	1A
— 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	5.50 A
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	15 A
— at 220 V rated value	3 A
— at 440 V rated value	0.27 A
— at 600 V rated value	0.16 A
with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value	35 A
— at 60 V rated value	35 A
— at 110 V rated value	35 A
— at 220 V rated value	10 A
— at 440 V rated value	0.6 A
— at 600 V rated value	0.6 A
operating power	
• at AC-3	
— at 230 V rated value	2.2 kW
— at 400 V rated value	4 kW
— at 500 V rated value	4 kW
— at 690 V rated value	7.5 kW
• at AC-3e	
— at 230 V rated value	2.2 kW
— at 400 V rated value	4 kW
— at 500 V rated value	4 kW
— at 690 V rated value	7.5 kW
operating power for approx. 200000 operating cycles at AC-	
at 400 V rated value	2 kW
at 690 V rated value	2.5 kW
operating apparent power at AC-6a	
up to 230 V for current peak value n=20 rated value	4.5 kVA
<ul> <li>up to 400 V for current peak value n=20 rated value</li> </ul>	7.8 kVA
up to 500 V for current peak value n=20 rated value	7.8 kVA
up to 690 V for current peak value n=20 rated value	10.7 kVA
operating apparent power at AC-6a	
up to 230 V for current peak value n=30 rated value	3 kVA
• up to 400 V for current peak value n=30 rated value	5.2 kVA
• up to 500 V for current peak value n=30 rated value	5.2 kVA
• up to 690 V for current peak value n=30 rated value	7.2 kVA
short-time withstand current in cold operating state up to 40 °C	
Iimited to 1 s switching at zero current maximum	170 A; Use minimum cross-section acc. to AC-1 rated value
Ilmited to 1's switching at zero current maximum     Ilmited to 5 s switching at zero current maximum	170 A; Use minimum cross-section acc. to AC-1 rated value
Ilmited to 5 s switching at zero current maximum     Iimited to 10 s switching at zero current maximum	140 A; Use minimum cross-section acc. to AC-1 rated value
Ilmited to 10's switching at zero current maximum     Ilmited to 30's switching at zero current maximum	104 A; Use minimum cross-section acc. to AC-1 rated value
Ilmited to 50 s switching at zero current maximum     Ilmited to 60 s switching at zero current maximum	88 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	23, 230 Hillimitati oroso ocolion aco. to 710 i rated value
• at AC	5 000 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-3e maximum	1 000 1/h
at AC-4 maximum	300 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
• at 50 Hz rated value	24 V
at 60 Hz rated value	24 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	68 VA
• at 60 Hz	67 VA
inductive power factor with closing power of the coil	
• at 50 Hz	0.72
• at 60 Hz	0.74
apparent holding power of magnet coil at AC	
• at 50 Hz	7.9 VA
• at 60 Hz	6.5 VA
inductive power factor with the holding power of the coil	
• at 50 Hz	0.25
• at 60 Hz	0.28
closing delay	0.20
• at AC	8 40 ms
opening delay	0 40 1115
• at AC	4 16 ms
arcing time	10 10 ms
control version of the switch operating mechanism	Standard A1 - A2
control version of the switch operating mechanism  Auxiliary circuit	Standard A1 - A2
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact	Standard A1 - A2
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous	Standard A1 - A2
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum	Standard A1 - A2
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15	Standard A1 - A2  1  1  10 A
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value	Standard A1 - A2  1  1  10 A
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15	Standard A1 - A2  1  1  10 A
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value	Standard A1 - A2  1  1  10 A
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value  • at 400 V rated value	Standard A1 - A2  1  1  10 A  10 A  3 A
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value  • at 400 V rated value  • at 500 V rated value	Standard A1 - A2  1  1  10 A  10 A  3 A 2 A
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value  • at 400 V rated value  • at 500 V rated value  • at 690 V rated value	Standard A1 - A2  1  1  10 A  10 A  3 A 2 A
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value  operational current at DC-12	Standard A1 - A2  1  1  10 A  10 A  3 A 2 A 1 A
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value  operational current at DC-12 • at 24 V rated value	Standard A1 - A2  1  1  10 A  10 A  3 A 2 A 1 A
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value  operational current at DC-12  • at 24 V rated value • at 48 V rated value	Standard A1 - A2  1  1  10 A  10 A  3 A  2 A  1 A  10 A
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value  operational current at DC-12  • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 60 V rated value	Standard A1 - A2  1  1  10 A  10 A  3 A  2 A  1 A  10 A  6 A  6 A
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value  operational current at DC-12  • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 60 V rated value • at 61 V rated value	Standard A1 - A2  1  1  10 A  10 A  3 A  2 A  1 A  10 A  6 A  6 A  3 A
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value  operational current at DC-12  • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value	Standard A1 - A2  1  1  10 A  10 A  3 A  2 A  1 A  10 A  6 A  6 A  6 A  3 A  2 A
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value  operational current at DC-12  • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 220 V rated value	Standard A1 - A2  1  1  10 A  10 A  3 A  2 A  1 A  10 A  6 A  6 A  3 A  2 A  1 A
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value  operational current at DC-12  • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value	Standard A1 - A2  1  1  10 A  10 A  3 A  2 A  1 A  10 A  6 A  6 A  3 A  2 A  1 A
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value  operational current at DC-12  • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value	Standard A1 - A2  1  1  10 A  10 A  3 A  2 A  1 A  10 A  6 A  6 A  6 A  3 A  2 A  1 A  0.15 A
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value  operational current at DC-12  • at 24 V rated value • at 48 V rated value • at 60 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 220 V rated value • at 600 V rated value • at 220 V rated value • at 24 V rated value • at 24 V rated value • at 25 V rated value • at 27 V rated value • at 28 V rated value • at 29 V rated value	Standard A1 - A2  1  1  10 A  10 A  3 A  2 A  1 A  10 A  6 A  6 A  3 A  2 A  1 A  0.15 A
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value  operational current at DC-12  • at 24 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 125 V rated value • at 220 V rated value • at 220 V rated value • at 48 V rated value • at 48 V rated value • at 600 V rated value • at 600 V rated value • at 600 V rated value • at 48 V rated value	Standard A1 - A2  1  1  10 A  10 A  3 A  2 A  1 A  10 A  6 A  6 A  6 A  3 A  2 A  1 A  0.15 A
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value  operational current at DC-12  • at 24 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 48 V rated value • at 600 V rated value	Standard A1 - A2  1  1  10 A  10 A  3 A  2 A  1 A  10 A  6 A  6 A  6 A  3 A  2 A  1 A  0.15 A
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value  operational current at DC-12  • at 24 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 600 V rated value • at 110 V rated value	Standard A1 - A2  1  1  10 A  10 A  3 A  2 A  1 A  10 A  6 A  6 A  6 A  3 A  2 A  1 A  0.15 A  10 A  2 A  1 A  0.9 A
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value  operational current at DC-12  • at 24 V rated value • at 48 V rated value • at 110 V rated value • at 125 V rated value • at 220 V rated value • at 600 V rated value • at 24 V rated value • at 600 V rated value • at 100 V rated value • at 110 V rated value • at 110 V rated value • at 125 V rated value	Standard A1 - A2  1  1  10 A  10 A  3 A  2 A  1 A  10 A  6 A  6 A  6 A  3 A  2 A  1 A  0.15 A  10 A  2 A  2 A  1 A  0.9 A  0.3 A
control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts instantaneous contact  number of NO contacts for auxiliary contacts instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  • at 230 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value  operational current at DC-12  • at 24 V rated value • at 48 V rated value • at 110 V rated value • at 220 V rated value • at 600 V rated value • at 125 V rated value • at 110 V rated value	Standard A1 - A2  1  1  10 A  10 A  3 A  2 A  1 A  10 A  6 A  6 A  6 A  3 A  2 A  1 A  0.15 A  10 A  2 A  1 A  0.9 A

UL/CSA ratings	
full-load current (FLA) for 3-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
	Пр
• for 3-phase AC motor	2 hn
— 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
contact rating of auxiliary contacts according to UL	A600 / P600
Short-circuit protection	
design of the fuse link	
for short-circuit protection of the main circuit  with type of accordination 1 required.	aC+ 62A (600)/ 400(A) aM+ 22A (600)/ 400(A) D000+ 60A (445)/ 00(A)
— with type of coordination 1 required	gG: 63A (690V,100kA), aM: 32A (690V,100kA), BS88: 63A (415V,80kA)
— with type of assignment 2 required	gG: 25A (690V,100kA), aM: 20A (690V,100kA), BS88: 25A (415V,80kA)
for short-circuit protection of the auxiliary switch required	gG: 10 A (500 V, 1 kA)
Installation/ mounting/ dimensions	
mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
fastening method side-by-side mounting	Yes
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
height	102 mm
width	45 mm
depth	97 mm
required spacing	
<ul><li>with side-by-side mounting</li></ul>	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	0 mm
<ul> <li>for grounded parts</li> </ul>	
— forwards	10 mm
— upwards	10 mm
— at the side	6 mm
— downwards	10 mm
• for live parts	
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	6 mm
Connections/ Terminals	
type of electrical connection	
for main current circuit	spring-loaded terminals
for main current circuit     for auxiliary and control circuit	spring-loaded terminals spring-loaded terminals
•	
at contactor for auxiliary contacts     of magnet coil.	Spring-type terminals
of magnet coil  type of connectable conductor cross sections	Spring-type terminals
type of connectable conductor cross-sections	
• for main contacts	0/4 40
— solid	2x (1 10 mm²)
— solid or stranded	2x (1 10 mm²)
finally atranded with some and processing	2x (1 6 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	
— finely stranded without core end processing	2x (1 6 mm²)
	2x (1 6 mm²) 2x (18 8)
— finely stranded without core end processing	
<ul><li>— finely stranded without core end processing</li><li>for AWG cables for main contacts</li></ul>	
— finely stranded without core end processing     • for AWG cables for main contacts  connectable conductor cross-section for main contacts	2x (18 8)

finely stranded without core end processing	1 6 mm²
connectable conductor cross-section for auxiliary contacts	
solid or stranded	0.5 2.5 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 1.5 mm²
<ul> <li>finely stranded without core end processing</li> </ul>	0.5 2.5 mm²
type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
<ul><li>— solid or stranded</li></ul>	2x (0.5 2.5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²)
<ul> <li>finely stranded without core end processing</li> </ul>	2x (0.5 2.5 mm²)
<ul> <li>for AWG cables for auxiliary contacts</li> </ul>	2x (20 14)
AWG number as coded connectable conductor cross section	
<ul> <li>for main contacts</li> </ul>	18 8
<ul> <li>for auxiliary contacts</li> </ul>	20 14
Safety related data	
product function	
<ul> <li>mirror contact according to IEC 60947-4-1</li> </ul>	Yes
<ul> <li>positively driven operation according to IEC 60947-5-1</li> </ul>	No
suitable for safety function	Yes
suitability for use safety-related switching OFF	Yes
service life maximum	20 a
test wear-related service life necessary	Yes
proportion of dangerous failures	
<ul> <li>with low demand rate according to SN 31920</li> </ul>	40 %
<ul> <li>with high demand rate according to SN 31920</li> </ul>	73 %
B10 value with high demand rate according to SN 31920	1 000 000
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
ISO 13849	
device type according to ISO 13849-1	3
overdimensioning according to ISO 13849-2 necessary	Yes
IEC 61508	
safety device type according to IEC 61508-2	Type A
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
Approvals Certificates	

## **General Product Approval**









Confirmation



**General Product Approval** 

**EMV** 

**Test Certificates** 

Marine / Shipping

<u>KC</u>





Type Test Certificates/Test Report

Special Test Certificate



## Marine / Shipping













other Railway Environment



Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Confirmation

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=3RT2023-2AC20

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2023-2AC20

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2023-2AC20

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

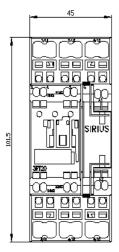
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2023-2AC20&lang=en

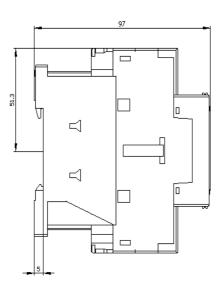
Characteristic: Tripping characteristics, I2t, Let-through current

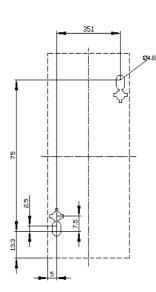
https://support.industry.siemens.com/cs/ww/en/ps/3RT20

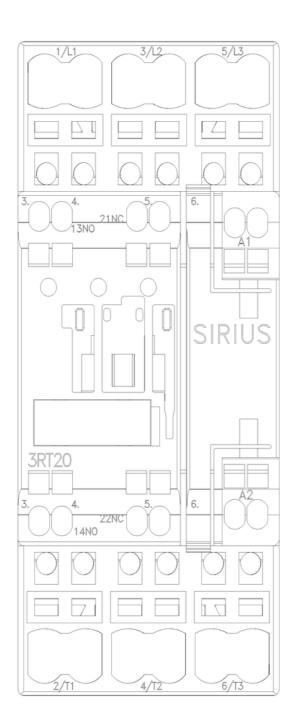
Further characteristics (e.g. electrical endurance, switching frequency)

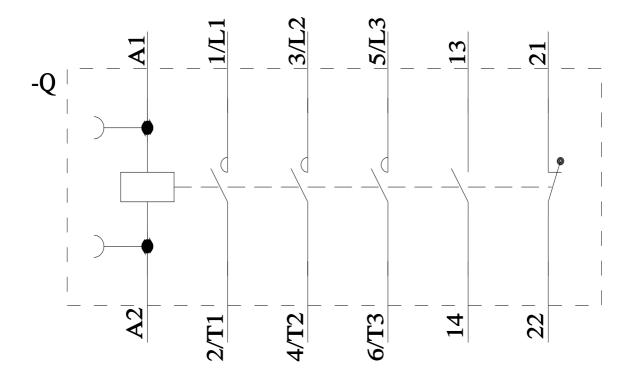
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2023-2AC20&objecttype=14&gridview=view1











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