# **SIEMENS**

Data sheet 3RT2326-2AC20



contactor AC-1, 40 A, 400 V / 40 °C, 4-pole, 24 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	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>	9.6 W
at AC in hot operating state per pole	2.4 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	
of main circuit rated value	6 kV
of auxiliary circuit rated value	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)	
of contactor typical	10 000 000
of the contactor with added auxiliary switch block typical	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	10/01/2009
Ambient conditions	
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	40.4
<ul> <li>at AC-1 at 400 V at ambient temperature 40 °C rated value</li> </ul>	40 A

<ul> <li>at AC-1</li> <li>up to 690 V at ambient temperature 40 °C rated</li> <li>40 A</li> </ul>	
— IID to 690 V at amplent temperature 40 °C, rated	
value	
— up to 690 V at ambient temperature 60 °C rated 35 A	
value	
• at AC-3	
— at 400 V rated value 15.5 A	
• at AC-4 at 400 V rated value 15.5 A	
minimum cross-section in main circuit at maximum AC-1 rated 10 mm²	
value	
operating power  ■ at AC-3 at 400 V rated value 7.5 kW	
• at AC-4 at 400 V rated value 7.5 kW	
short-time withstand current in cold operating state up to	
40 °C	
• limited to 1 s switching at zero current maximum  Use minimum cross-section acc. to Al	C-1 rated value
• limited to 5 s switching at zero current maximum  Use minimum cross-section acc. to Al	C-1 rated value
• limited to 10 s switching at zero current maximum  Use minimum cross-section acc. to Al	C-1 rated value
• limited to 30 s switching at zero current maximum  Use minimum cross-section acc. to Al	C-1 rated value
• limited to 60 s switching at zero current maximum  Use minimum cross-section acc. to Al	C-1 rated value
no-load switching frequency	
• at AC 5 000 1/h	
operating frequency at AC-1 maximum 1 000 1/h	
Control circuit/ Control	
type of voltage AC	
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	
• at 60 Hz 79 VA	
inductive power factor with closing power of the coil	
• at 50 Hz 0.72	
• at 60 Hz 0.74	
apparent holding power of magnet coil at AC	
• at 50 Hz 10.5 VA	
• at 60 Hz 8.5 VA	
inductive power factor with the holding power of the coil	
• at 50 Hz 0.25	
• at 60 Hz 0.28	
closing delay	
• at AC 8 40 ms	
opening delay	
• at AC 4 16 ms	
arcing time 10 10 ms	
control version of the switch operating mechanism Standard A1 - A2	
Auxiliary circuit	
number of NC contacts for auxiliary contacts	
• attachable 2	
• instantaneous contact 1	
number of NO contacts for auxiliary contacts	
• attachable 2	
instantaneous contact     1	
operational current at AC-12 maximum 10 A	
operational current at AC-12 maximum 10 A	

• at 500 V rated value	2 A
at 690 V rated value	1 A
operational 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
<ul> <li>at 125 V rated value</li> </ul>	2 A
<ul> <li>at 220 V rated value</li> </ul>	1 A
at 600 V rated value	0.15 A
operational current at DC-13	
<ul> <li>at 24 V rated value</li> </ul>	10 A
<ul> <li>at 48 V rated value</li> </ul>	2 A
<ul> <li>at 110 V rated value</li> </ul>	1 A
<ul> <li>at 125 V rated value</li> </ul>	0.9 A
<ul> <li>at 220 V rated value</li> </ul>	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	
<ul> <li>for short-circuit protection of the main circuit</li> </ul>	
<ul> <li>— with type of coordination 1 required</li> </ul>	gG: 63 A (690 V, 100 kA)
— with type of assignment 2 required	gG: 20 A (690 V, 100 kA)
for short-circuit protection of the auxiliary switch required	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° on vertical mounting surface
fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
fastening method • side-by-side mounting	
•	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
• side-by-side mounting	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes
side-by-side mounting     height	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm
side-by-side mounting     height     width	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm
side-by-side mounting  height  width  depth	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm
side-by-side mounting     height     width     depth     required spacing	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm
side-by-side mounting     height     width     depth     required spacing         • with side-by-side mounting	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm
side-by-side mounting     height     width     depth     required spacing         • with side-by-side mounting         — forwards	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm
side-by-side mounting     height     width     depth     required spacing	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm 10 mm
side-by-side mounting     height     width     depth     required spacing         • with side-by-side mounting             — forwards             — upwards             — downwards	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm 10 mm 10 mm
side-by-side mounting     height     width     depth     required spacing         • with side-by-side mounting             — forwards             — upwards             — downwards             — at the side	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm 10 mm 10 mm
side-by-side mounting     height     width     depth     required spacing         • with side-by-side mounting             — forwards             — upwards             — downwards             — at the side         • for grounded parts	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm 10 mm 10 mm 10 mm
side-by-side mounting  height  width  depth  required spacing      with side-by-side mounting     — forwards     — upwards     — downwards     — at the side      for grounded parts     — forwards	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm  10 mm 10 mm 10 mm 10 mm
side-by-side mounting     height     width     depth  required spacing	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm  10 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting     height     width     depth     required spacing         • with side-by-side mounting             — forwards             — upwards             — downwards             — at the side             • for grounded parts             — upwards             — at the side             • for wards             — upwards             — at the side	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm  10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing  with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — at the side — downwards — at the side — downwards	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm  10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing  with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — at the side of or grounded parts — forwards — upwards — at the side — downwards — at the side — for live parts	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm  10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing  with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — at the side of for grounded parts — forwards — upwards — at the side — downwards — at the side — downwards  for live parts — forwards	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm  10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing  with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — at the side of for grounded parts — forwards — upwards — at the side — downwards  for live parts — forwards — upwards  upwards  of ror live parts — forwards — upwards  upwards	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm  10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing  with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — at the side of or grounded parts — forwards — upwards — at the side — downwards  for live parts — forwards — upwards — downwards  of or live parts — forwards — upwards — upwards — downwards — downwards	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm  10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing  with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — at the side of for grounded parts — forwards — upwards — at the side — downwards  for live parts — forwards — upwards — upwards — at the side — downwards — at the side — downwards — at the side  Connections/ Terminals	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm  10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing  with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — at the side of for grounded parts — forwards — upwards — at the side — downwards  for live parts — forwards — upwards — upwards — at the side — downwards — at the side — downwards — at the side	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm  10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing  with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — at the side — downwards — at the side — downwards — if or live parts — forwards — upwards — upwards — at the side — downwards — to remain side — downwards — if or live parts — forwards — upwards — at the side  Connections/ Terminals  type of electrical connection  for main current circuit	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm  10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 6 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing  with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — at the side — downwards — at the side — downwards  of or live parts — forwards — upwards — upwards — at the side  Connections/ Terminals  type of electrical connection  of or auxiliary and control circuit	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm  10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 6 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing  with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — at the side — downwards — upwards — upwards — at the side  Connections/ Terminals  type of electrical connection  for main current circuit for auxiliary and control circuit at contactor for auxiliary contacts	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm  10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 5 mm 10 mm 10 mm 5 mm 10 mm 5 mm 10 mm 10 mm 5 mm 10 mm
side-by-side mounting height width depth required spacing  with side-by-side mounting — forwards — upwards — downwards — at the side  for grounded parts — forwards — upwards — at the side — downwards — torwards — upwards — upwards — at the side  Connections/ Terminals  type of electrical connection  for main current circuit  for auxiliary and control circuit  at contactor for auxiliary contacts  of magnet coil	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm  10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 6 mm 10 mm 10 mm 10 mm 10 mm
side-by-side mounting height width depth required spacing  with side-by-side mounting — forwards — upwards — downwards — at the side for grounded parts — forwards — upwards — at the side — downwards — upwards — upwards — at the side  Connections/ Terminals  type of electrical connection  for main current circuit for auxiliary and control circuit at contactor for auxiliary contacts	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715 Yes 102 mm 60 mm 97 mm  10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 10 mm 5 mm 10 mm 10 mm 5 mm 10 mm 5 mm 10 mm 10 mm 5 mm 10 mm

<ul> <li>solid or stranded</li> </ul>	2x (1 10 mm²)	
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 6 mm²)	
<ul> <li>finely stranded without core end processing</li> </ul>	2x (1 6 mm²)	
connectable conductor cross-section for main contacts		
• solid	1 10 mm²	
<ul> <li>solid or stranded</li> </ul>	1 10 mm²	
• stranded	1 10 mm²	
<ul> <li>finely stranded with core end processing</li> </ul>	1 6 mm²	
<ul> <li>finely stranded without core end processing</li> </ul>	1 6 mm²	
connectable conductor cross-section for auxiliary contacts		
<ul> <li>solid or stranded</li> </ul>	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		
for auxiliary contacts		
— solid	2x (0.5 2.5 mm²)	
<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)	
for AWG cables for auxiliary contacts	2x (20 14)	
AWG number as coded connectable conductor cross section		
• for main contacts	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	
T1 value for proof test interval or service life according to IEC 61508	20 a	
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	
Communication/ Protocol		
product function bus communication	No	
Certificates/ approvals		
General Product Approval		EMC

General Product Approval

EMC



Confirmation









Functional Safety/Safety of Machinery

**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping

Type Examination Certificate





Type Test Certificates/Test Report

Special Test Certificate



### Marine / Shipping













other Railway Environment



#### **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=3RT2326-2AC20

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2326-2AC20

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT2326-2AC20

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

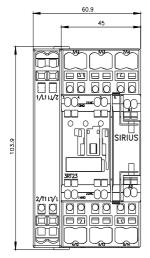
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2326-2AC20&lang=en

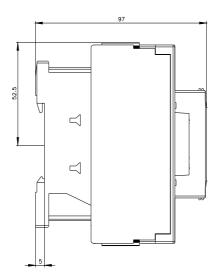
Characteristic: Tripping characteristics, I2t, Let-through current

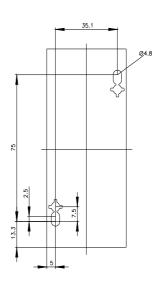
 $\underline{https://support.industry.siemens.com/cs/ww/en/ps/3RT2326-2AC20/char}$ 

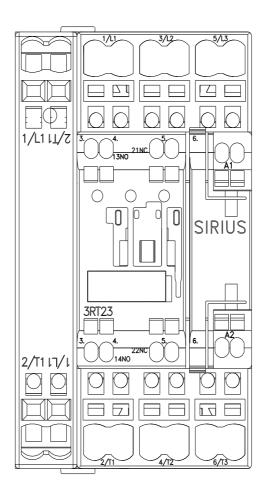
Further characteristics (e.g. electrical endurance, switching frequency)

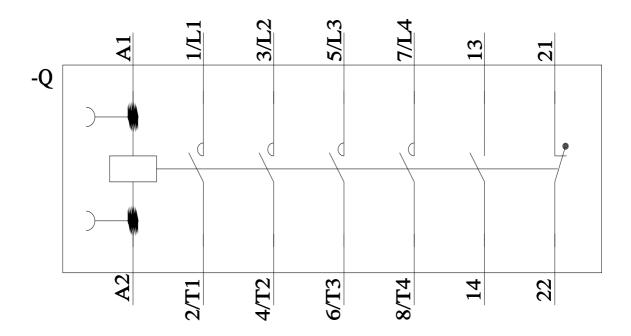
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2326-2AC20&objecttype=14&gridview=view1











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