# **SIEMENS**

3RT2326-2BG40 **Data sheet** 



Contactor, AC-1, 40 A/400 V/40 °C, S0, 4-pole, 125 V DC, 1 NO+1 NC, Spring-type terminal

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
<ul> <li>at AC in hot operating state per pole</li> </ul>	2.4 W
<ul> <li>without load current share typical</li> </ul>	5.9 W
insulation voltage	
<ul> <li>of main circuit with degree of pollution 3 rated value</li> </ul>	690 V
<ul> <li>of the auxiliary and control circuit with degree of pollution 3 rated value</li> </ul>	690 V
surge voltage resistance	
<ul> <li>of main circuit rated value</li> </ul>	6 kV
of auxiliary circuit rated value	6 kV
shock resistance at rectangular impulse	
at DC	10g / 5 ms, 7,5g / 10 ms
shock resistance with sine pulse	
at DC	15g / 5 ms, 10g / 10 ms
mechanical service life (switching 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	
<ul> <li>during operation</li> </ul>	-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	
at AC-1 at 400 V at ambient temperature 40 °C	40 A
rated value	
• at AC-1	
— up to 690 V at ambient temperature 40 °C	40 A
rated value	05.4
— up to 690 V at ambient temperature 60 °C	35 A
rated value	
• at AC-3	45.54
— 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 value	10 mm <sup>2</sup>
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 AC-1 rated value
limited to 5 s switching at zero current maximum	Use minimum cross-section acc. to AC-1 rated value
limited to 10 s switching at zero current maximum	Use minimum cross-section acc. to AC-1 rated value
	Use minimum cross-section acc. to AC-1 rated value
limited to 30 s switching at zero current maximum     limited to 60 s switching at zero current maximum	
Iimited to 60 s switching at zero current maximum  Polload switching frequency	Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	4 F00 4/b
• at DC	1 500 1/h
operating frequency at AC-1 maximum	1 000 1/h
Control circuit/ Control	
type of voltage	DC
type of voltage of the control supply voltage	DC
control supply voltage at DC	
rated value	125 V
operating range factor control supply voltage rated	
value of magnet coil at DC	
-	
• initial value	0.8
-	0.8 1.1
• initial value	1.1 5.9 W
initial value     full-scale value	1.1
initial value     full-scale value  closing power of magnet coil at DC	1.1 5.9 W
initial value     full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC	1.1 5.9 W
initial value     full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay	1.1 5.9 W 5.9 W
initial value     full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay     at DC	1.1 5.9 W 5.9 W
initial value     full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay     at DC  opening delay	1.1 5.9 W 5.9 W
initial value  full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay  at DC  opening delay  at DC	1.1 5.9 W 5.9 W 50 170 ms
initial value  full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay  at DC  opening delay  at DC  arcing time	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms
initial value  full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay  at DC  opening delay  at DC  arcing time  control version of the switch operating mechanism  Auxiliary circuit	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value  full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay  at DC  opening delay  at DC  arcing time  control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value  full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay  at DC  opening delay  at DC  arcing time  control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts  attachable	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value  full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay  at DC  opening delay  at DC  arcing time  control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts  attachable  instantaneous contact	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value  full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay  at DC  opening delay  at DC  arcing time  control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts  attachable  instantaneous contact  number of NO contacts for auxiliary contacts	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value  full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay  at DC  opening delay  at DC  arcing time  control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts  attachable  instantaneous contact  number of NO contacts for auxiliary contacts  attachable	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value  full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay  at DC  opening delay  at DC  arcing time  control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts  attachable  instantaneous contact  number of NO contacts for auxiliary contacts  attachable  instantaneous contact  attachable  instantaneous contact	1.1 5.9 W 5.9 W 50 170 ms  15 18 ms 10 10 ms Standard A1 - A2
initial value  full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay  at DC  opening delay  at DC  arcing time  control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts  attachable  instantaneous contact  number of NO contacts for auxiliary contacts  attachable  instantaneous contact  operational current at AC-12 maximum	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value  full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay  at DC  opening delay  at DC  arcing time  control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts  attachable  instantaneous contact  number of NO contacts for auxiliary contacts  attachable  instantaneous contact  operational current at AC-12 maximum  operational current at AC-15	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value  full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay  at DC  opening delay  at DC  arcing time  control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts  attachable  instantaneous contact  number of NO contacts for auxiliary contacts  attachable  instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  at 230 V rated value	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value  full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay  at DC  opening delay  at DC  arcing time  control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts  attachable  instantaneous contact  number of NO contacts for auxiliary contacts  attachable  instantaneous contact  operational current at AC-12 maximum  operational current at AC-15	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value  full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay  at DC  opening delay  at DC  arcing time  control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts  attachable  instantaneous contact  number of NO contacts for auxiliary contacts  attachable  instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  at 230 V rated value	1.1 5.9 W 5.9 W 50 170 ms 15 18 ms 10 10 ms Standard A1 - A2
initial value  full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay  at DC  opening delay  at DC  arcing time  control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts  attachable  instantaneous contact  number of NO contacts for auxiliary contacts  attachable  instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  at 230 V rated value  at 400 V rated value	1.1 5.9 W 5.9 W 50 170 ms  15 18 ms 10 10 ms Standard A1 - A2
initial value  full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay  at DC  opening delay  at DC  arcing time  control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts  attachable  instantaneous contact  number of NO contacts for auxiliary contacts  attachable  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	1.1 5.9 W 5.9 W 50 170 ms  15 18 ms 10 10 ms Standard A1 - A2
initial value  full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay  at DC  opening delay  at DC  arcing time  control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts  attachable  instantaneous contact  number of NO contacts for auxiliary contacts  attachable  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  at 690 V rated value	1.1 5.9 W 5.9 W 50 170 ms  15 18 ms 10 10 ms Standard A1 - A2
initial value  full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay  at DC  opening delay  at DC  arcing time  control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts  attachable  instantaneous contact  number of NO contacts for auxiliary contacts  attachable  instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  at 230 V rated value  at 400 V rated value  at 690 V rated value  at 690 V rated value  operational current at DC-12	1.1 5.9 W 5.9 W 50 170 ms  15 18 ms 10 10 ms Standard A1 - A2
initial value  full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay  at DC  opening delay  at DC  arcing time  control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts  attachable  instantaneous contact  number of NO contacts for auxiliary contacts  attachable  instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  at 230 V rated value  at 400 V rated value  at 690 V rated value  at 690 V rated value  at 24 V rated value  operational current at DC-12  at 24 V rated value	1.1 5.9 W 5.9 W 50 170 ms  15 18 ms 10 10 ms Standard A1 - A2  1 2 1 1 2 1 1 0 A  10 A  10 A  10 A
initial value  full-scale value  closing power of magnet coil at DC  holding power of magnet coil at DC  closing delay  at DC  opening delay  at DC  arcing time  control version of the switch operating mechanism  Auxiliary circuit  number of NC contacts for auxiliary contacts  attachable  instantaneous contact  number of NO contacts for auxiliary contacts  attachable  instantaneous contact  operational current at AC-12 maximum  operational current at AC-15  at 230 V rated value  at 400 V rated value  at 690 V rated value  at 690 V rated value  at 24 V rated value  operational current at DC-12  at 24 V rated value  at 48 V rated value  at 48 V rated value  at 48 V rated value	1.1 5.9 W 5.9 W 50 170 ms  15 18 ms 10 10 ms Standard A1 - A2  1 2 1 1 2 1 1 1 A 10 A 3 A 2 A 1 A 10 A 6 A

<ul> <li>at 125 V rated value</li> </ul>	2 A			
<ul> <li>at 220 V rated value</li> </ul>	1 A			
<ul> <li>at 600 V rated value</li> </ul>	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><li>at 110 V rated value</li><li>at 125 V rated value</li></ul>	2 A 1 A 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)			
<ul> <li>for short-circuit protection of the auxiliary switch</li> </ul>	gG: 10 A (690 V, 1 kA)			
required				
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 standard mounting rail according to DIN EN 60715			
<ul> <li>side-by-side mounting</li> </ul>	Yes			
height	102 mm			
width	60 mm			
depth	107 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			
— forwards — upwards	10 mm 10 mm			
— upwards	10 mm			
— upwards — downwards	10 mm 10 mm			
<ul><li>— upwards</li><li>— downwards</li><li>— at the side</li></ul>	10 mm 10 mm			
upwards downwards at the side  Connections/ Terminals	10 mm 10 mm			
— upwards — downwards — at the side  Connections/ Terminals  type of electrical connection	10 mm 10 mm 6 mm			
— upwards — downwards — at the side  Connections/ Terminals  type of electrical connection  ● for main current circuit	10 mm 10 mm 6 mm spring-loaded terminals			
<ul> <li>upwards</li> <li>downwards</li> <li>at the side</li> </ul> Connections/ Terminals type of electrical connection <ul> <li>for main current circuit</li> <li>for auxiliary and control circuit</li> </ul>	10 mm 10 mm 6 mm spring-loaded terminals spring-loaded terminals			
- upwards - downwards - at the side  Connections/ Terminals  type of electrical connection  • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts	10 mm 10 mm 6 mm  spring-loaded terminals spring-loaded terminals Spring-type terminals			
upwards downwards 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	10 mm 10 mm 6 mm  spring-loaded terminals spring-loaded terminals Spring-type terminals			
- upwards - downwards - at the side  Connections/ Terminals  type of electrical connection	10 mm 10 mm 6 mm  spring-loaded terminals spring-loaded terminals Spring-type terminals Spring-type terminals			
- upwards - downwards - 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  type of connectable conductor cross-sections • for main contacts	10 mm 10 mm 6 mm  spring-loaded terminals spring-loaded terminals Spring-type terminals			
<ul> <li>upwards</li> <li>downwards</li> <li>at the side</li> </ul> Connections/ Terminals type of electrical connection <ul> <li>for main current circuit</li> <li>for auxiliary and control circuit</li> <li>at contactor for auxiliary contacts</li> <li>of magnet coil</li> </ul> type of connectable conductor cross-sections <ul> <li>for main contacts</li> <li>solid</li> </ul>	10 mm 10 mm 6 mm  spring-loaded terminals spring-loaded terminals Spring-type terminals Spring-type terminals  2x (1 10 mm²)			
- upwards - downwards - 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  type of connectable conductor cross-sections • for main contacts - solid - solid or stranded	10 mm 10 mm 6 mm  spring-loaded terminals spring-loaded terminals Spring-type terminals Spring-type terminals  2x (1 10 mm²) 2x (1 10 mm²)			

at AWG cables for main contacts	2x (18 8)
connectable conductor cross-section for main contacts	
• solid	1 10 mm²
<ul> <li>solid or stranded</li> </ul>	1 10 mm²
<ul><li>stranded</li></ul>	1 10 mm²
<ul> <li>finely stranded 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
finely stranded without core end processing	0.5 2.5 mm²
type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
— 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)
at AWG cables for auxiliary contacts	2x (20 14)
AWG number as coded connectable conductor cross section	
<ul> <li>for main contacts</li> </ul>	18 8
for auxiliary contacts	20 14
Safety related data	
product function	
mirror contact according to IEC 60947-4-1	Yes
T1 value for proof test interval or service life according to IEC 61508	20 y
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** 



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 Dangerous Good

#### Confirmation



## Transport Information

#### **Further information**

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=3RT2326-2BG40

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT2326-2BG40

 ${\bf Service \& Support~(Manuals,~Certificates,~Characteristics,~FAQs,...)}$ 

https://support.industry.siemens.com/cs/ww/en/ps/3RT2326-2BG40

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

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT2326-2BG40&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT2326-2BG40/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT2326-2BG40&objecttype=14&gridview=view1

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