# SIEMENS

#### Data sheet

### 3RT1023-1AF00

CONTACTOR, AC-3 4KW/400V, AC 110V, 50HZ, 3-POLE, SIZE S0, SCREW CONNECTION



Figure similar

Product brand name	SIRIUS
Product designation	power contactor
General technical data	
Size of contactor	SO
Degree of pollution	3
Protection class IP	
• on the front	IP20
• of the terminal	IP00
Mechanical service life (switching cycles)	
<ul> <li>of contactor typical</li> </ul>	10 000 000
<ul> <li>of the contactor with added electronics-</li> </ul>	5 000 000
compatible auxiliary switch block typical	
<ul> <li>of the contactor with added auxiliary switch</li> </ul>	10 000 000
block typical	
Ambient conditions	
Installation altitude at height above sea level	
• maximum	2 000 m

Ambient temperature	
• during operation	-25 +60 °C
1ain 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 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 °C rated value	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 AC-4 at 400 V rated value	8.5 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
<ul> <li>with 2 current paths in series at DC-1</li> </ul>	
— at 24 V rated value	35 A
— at 110 V rated value	35 A
<ul> <li>with 3 current paths in series at DC-1</li> </ul>	
— at 24 V rated value	35 A
— at 110 V rated value	35 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
<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>	
— at 24 V rated value	35 A
— at 110 V rated value	15 A
<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul>	
— at 24 V rated value	35 A
— at 110 V rated value	35 A
Operating power	
• at AC-1	
— at 400 V rated value	23 kW
<ul> <li>at AC-2 at 400 V rated value</li> </ul>	4 kW

• at AC-3	
— at 400 V rated value	4 kW
— at 500 V rated value	4.5 kW
— at 690 V rated value	5.5 kW
Power loss [W] at AC-3 at 400 V for rated value of	0.4 W
the operating current per conductor	

Control circuit/ Control	
Type of voltage of the control supply voltage	AC
Control supply voltage at AC	
• at 50 Hz rated value	110 V
Control supply voltage frequency	50 Hz
Operating range factor control supply voltage rated	
value of magnet coil at AC	
• at 50 Hz	0.8 1.1
Apparent pick-up power of magnet coil at AC	61 V·A
Inductive power factor with closing power of the coil	0.82
Apparent holding power of magnet coil at AC	7.8 V·A
Inductive power factor with the holding power of the coil	0.24

## Auxiliary circuit

Number of NC contacts	
<ul> <li>for auxiliary contacts</li> </ul>	
— instantaneous contact	0
Number of NO contacts	
<ul> <li>for auxiliary contacts</li> </ul>	
— instantaneous contact	0
Operating current at AC-12 maximum	10 A
Operating current at AC-15	
• at 230 V rated value	6 A
• at 400 V rated value	3 A
Operating current at DC-12	
• at 60 V rated value	6 A
• at 110 V rated value	3 A
• at 220 V rated value	1 A
Operating current at DC-13	
• at 24 V rated value	10 A
• at 60 V rated value	2 A
• at 110 V rated value	1 A
• at 220 V rated value	0.3 A
Contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)

Design of the fuse link				
<ul> <li>for short-circuit protection of the main circuit</li> </ul>				
— with type of coordination 1 required	fuse gL/gG: 63 A			
— with type of assignment 2 required	fuse gL/gG: 25 A			
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gL/gG: 10 A			
Installation/ mounting/ dimensions				
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	91 mm			
Required spacing				
<ul> <li>for grounded parts</li> </ul>				
— at the side	6 mm			
Connections/Terminals				
Type of electrical connection				
<ul> <li>for main current circuit</li> </ul>	screw-type terminals			
<ul> <li>for auxiliary and control current circuit</li> </ul>	screw-type terminals			
Type of connectable conductor cross-sections				
<ul> <li>for main contacts</li> </ul>				
— solid	2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²			
— single or multi-stranded	2x (1 2,5 mm²), 2x (2,5 6 mm²), max. 2x 10 mm²			
— finely stranded with core end processing	2x (1 2.5 mm²), 2x (2.5 6 mm²)			
<ul> <li>at AWG conductors for main contacts</li> </ul>	2x (16 12), 2x (14 10), 1x 8			
Type of connectable conductor cross-sections				

- for auxiliary contacts
   solid
  - finely stranded with core end processing

• at AWG conductors for auxiliary contacts

Certificates/approvals

2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²), max. 2x (0.75 ... 4 mm²)

2x (0.5 ... 1.5 mm<sup>2</sup>), 2x (0.75 ... 2.5 mm<sup>2</sup>)

2x (20 ... 16), 2x (18 ... 14), 1x 12

General Product	Approval		Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates
CCC	(SA)	EHC	Type Examination Certificate	EG-Konf.	Special Test Certificate
Test	Marine / Shippi	ng			
Certificates					
Type Test	CAN BU		A CONTRACTOR OF THE OWNER	2 8	REPROVED PROA
Certificates/Test Report	ABS	Lloyd's Register Irs	RMRS	DNV DNV	DNV-GL DNVGLCOM/AF
Certificates/Test	ABS		RMRS		DNV.GL

#### urther information

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

Industry Mall (Online ordering system)

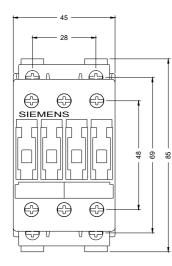
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1023-1AF00

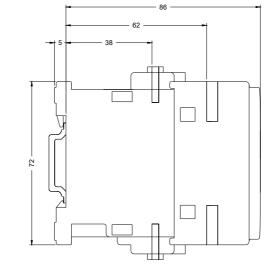
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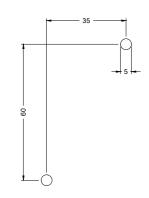
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1023-1AF00

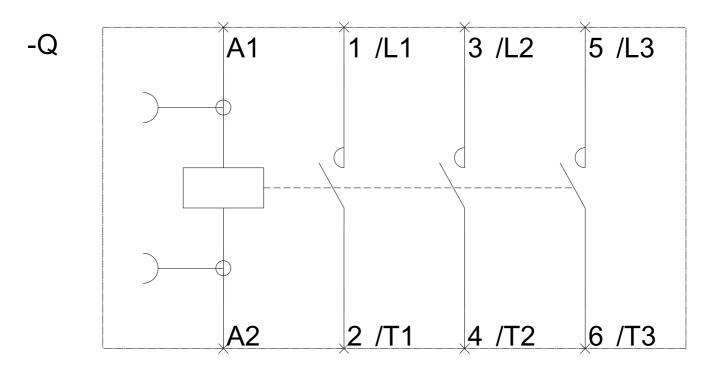
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT1023-1AF00

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT1023-1AF00&lang=en









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