# SIEMENS

## Data sheet

## 3RT1023-1AP04



CONTACTOR, AC-3 4KW/400V, AC 230V, 50HZ, 3-POLE, SIZE S0, SCREW CONNECTION, WITH 2NO+2NC

Figure similar	
product brand name	SIRIUS
Product designation	power contactor
General technical data:	
Size of contactor	SO
Degree of pollution	3
Mechanical service life (switching cycles)	
<ul> <li>of the contactor typical</li> </ul>	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
Protection class IP	
• on the front	IP20
• of the terminal	IP20
Equipment marking	
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q
Ambient conditions:	
Installation altitude at height above sea level maximum	2 000 m
Ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +60 °C
Main circuit:	
Number of poles for main current circuit	3
Number of NC contacts for main contacts	0

Number of NO contacts for main contacts	3
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
— 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	
<ul> <li>with 1 current path at DC-1</li> </ul>	
— 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	
<ul> <li>with 1 current path at DC-3 at DC-5</li> </ul>	
— 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 110 V Rated value	15 A
— at 24 V Rated value	35 A
<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul>	
— at 110 V Rated value	35 A
— at 24 V Rated value	35 A
Active power loss 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 with AC	
• at 50 Hz Rated value	230 V
Rated value	50 Hz
Operating range factor control supply voltage rated	
value of the magnet coil with AC	0.8 1.1
• at 50 Hz	
Apparent pick-up power of the magnet coil with AC Inductive power factor with closing power of the coil	61 V·A 0.82
inductive power ractor with closing power of the coll	0.02

Apparent holding power of the magnet coil with AC	7.8 V·A			
Inductive power factor with the holding power of the	0.24			
coil	0.24			
Auxiliary circuit:				
Number of NC contacts				
<ul> <li>for auxiliary contacts</li> </ul>				
— instantaneous contact	2			
Number of NO contacts				
<ul> <li>for auxiliary contacts</li> </ul>				
— instantaneous contact	2			
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 the auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)			
Short-circuit:				
Design of the fuse link				
<ul> <li>for short-circuit protection of the main circuit</li> </ul>				
— with type of assignment 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</li> </ul>	fuse gL/gG: 10 A			
required				
nstallation/ mounting/ dimensions:				
Mounting type	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 50022			
Side-by-side mounting	Yes			
Height	85 mm			
Width	45 mm			
Depth	140 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	screw-type terminals				
<ul> <li>for auxiliary and control current circ</li> </ul>	cuit	screw-type terminals					
Type of connectable conductor cross-see	ction						
<ul> <li>for main contacts</li> </ul>							
— solid	— solid			2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²			
— single or multi-stranded	— 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>for AWG conductors for main contain</li> </ul>	• for AWG conductors for main contacts		2x (16 12), 2x (14 10), 1x 8				
Type of connectable conductor cross-see	ction						
<ul> <li>for auxiliary contacts</li> </ul>							
— solid		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)					
— finely stranded with core end p	processing	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)					
<ul> <li>for AWG conductors for auxiliary conductors</li> </ul>	• for AWG conductors for auxiliary contacts		4), 1x 12				
Certificates/ approvals:	_						
General Product Approval			Functional	Declaration of			
			Safety/Safety of Machinery	Conformity			
			Type Examination				
		FAL					
		CUL					
CCC CSA	UL			EG-Konf.			
Test Certificates	Shipping A	pproval					
Type Test Special Test	ALCAN BU	Q Q					
Certificates/Test Certificate	ANA CHART	$\mathbf{T}\mathbf{A}$	GL®	Lloyd's			
Report	OX SHIPPING	DINV					
	ABS	DNV	GL	LRS			
Shipping other							
Approval							
Environmental	Confirmatio	on <u>other</u>					
<u>Confirmations</u>							
RMRS							

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

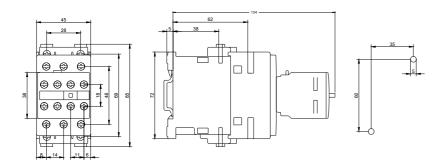
Industry Mall (Online ordering system) http://www.siemens.com/industrymall

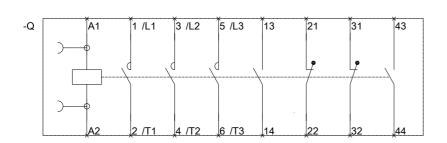
#### Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10231AP04

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT10231AP04

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT10231AP04&lang=en





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