# **SIEMENS**

Data sheet 3RT1016-2AB01

CONTACTOR, AC-3 4 KW/400 V, 1 NO, AC 24 V, 50/60 HZ, 3-POLE, SIZE S00, CAGE CLAMP CONNECTION



Figure similar

product brand name	SIRIUS	
Product designation	power contactor	
General technical data:		
Size of contactor	S00	
Degree of pollution	3	
Protection class IP		
• on the front	IP20	
• of the terminal	IP20	
Mechanical service life (switching cycles)		
of contactor typical	30 000 000	
<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	
Ambient conditions:		
Installation altitude at height above sea level maximum	2 000 m	
Ambient temperature		

• during operation

-25 ... +60 °C

lain circuit:  Number of NO contacts for main contacts	2
	3
Number of NC contacts for main contacts	0
Operating current	
• at AC-1 at 400 V	00.4
— at ambient temperature 40 °C rated value	22 A
• at AC-1 up to 690 V	
— at ambient temperature 40 °C rated value	22 A
— at ambient temperature 60 °C rated value	20 A
• at AC-3	
— at 400 V rated value	9 A
Operating current	
• at 1 current path at DC-1	
— at 24 V rated value	20 A
— at 110 V rated value	2.1 A
<ul><li>with 2 current paths in series at DC-1</li></ul>	
— at 24 V rated value	20 A
— at 110 V rated value	12 A
<ul> <li>with 3 current paths in series at DC-1</li> </ul>	
— at 24 V rated value	20 A
— at 110 V rated value	20 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	0.15 A
<ul> <li>with 2 current paths in series at DC-3 at DC-5</li> </ul>	
— at 110 V rated value	0.35 A
— at 24 V rated value	20 A
• with 3 current paths in series at DC-3 at DC-5	
— at 110 V rated value	20 A
— at 24 V rated value	20 A
Operating power	
• at AC-1	
— at 400 V rated value	13 kW
• at AC-2 at 400 V rated value	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	0.7 W

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
• rated value	50 Hz
Control supply voltage frequency 2 rated value	60 Hz
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	27 V·A
Inductive power factor with closing power of the coil	0.8
Apparent holding power of magnet coil at AC	4.4 V·A
Inductive power factor with the holding power of the	0.27
coil	
Auxiliary circuit:	
Number of NC contacts	
<ul><li>for auxiliary contacts</li></ul>	
<ul> <li>instantaneous contact</li> </ul>	0
Number of NO contacts	
<ul> <li>for auxiliary contacts</li> </ul>	
<ul><li>instantaneous contact</li></ul>	1
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)
Short-circuit protection	
Design of the fuse link	
for short-circuit protection of the main circuit	
with type of coordination 1 required	fuse gL/gG: 35 A
with type of assignment 2 required	fuse gL/gG: 20 A
5, p = 0. 000.g	

• for short-circuit protection of the auxiliary switch required

fuse gL/gG: 10 A

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	60 mm
Width	45 mm
Depth	73 mm
Required spacing	
<ul> <li>for grounded parts</li> </ul>	
— at the side	6 mm

Connections/ Terminals:		
Type of electrical connection		
• for main current circuit	spring-loaded terminals	
<ul> <li>for auxiliary and control current circuit</li> </ul>	spring-loaded terminals	
Type of connectable conductor cross-sections		
• for main contacts		
— solid	2x (0.25 2.5 mm²)	
<ul> <li>single or multi-stranded</li> </ul>	2x (0,25 2,5 mm²)	
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.25 1.5 mm²)	
<ul> <li>finely stranded without core end</li> </ul>	2x (0.25 2.5 mm²)	
processing		
<ul> <li>at AWG conductors for main contacts</li> </ul>	2x (24 14)	
Type of connectable conductor cross-sections		
<ul> <li>for auxiliary contacts</li> </ul>		
— solid	2x (0.25 2.5 mm²)	
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.25 1.5 mm²)	
<ul> <li>finely stranded without core end</li> </ul>	2x (0.25 2.5 mm²)	
processing		
<ul> <li>at AWG conductors for auxiliary contacts</li> </ul>	2x (24 14)	

## Certificates/approvals

#### **General Product Approval**

Functional Safety/Safety of Machinery Declaration of Conformity









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Test	Shipping Approval
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spezielle Prüfbescheinigunge

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### **Shipping Approval**

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Bestätigungen

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#### Further 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=3RT10162AB01

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT10162AB01}$ 

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT10162AB01

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT10162AB01&lang=en



