## **SIEMENS**

Data sheet 3RT1016-1BB41



CONTACTOR, AC-3 4 KW/400 V, 1 NO, DC 24 V, 3-POLE, SIZE S00, SCREW CONNECTION

Figure similar

product brand name	SIRIUS
Product designation	power contactor

General technical data:	
Degree of pollution	3
Mechanical service life (switching cycles)	
<ul> <li>of the contactor typical</li> </ul>	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
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

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		
<ul> <li>at 400 V at ambient temperature 40 °C</li> <li>Rated value</li> </ul>	Α	22

— up to 690 V at ambient temperature 40 $^{\circ}\text{C}$ Rated value	Α	22
— up to 690 V at ambient temperature 60 °C Rated value	Α	20
• at AC-3		
— at 400 V Rated value	Α	9
• at AC-4 at 400 V Rated value	Α	8.5
Operating current with 1 current path	_	
• at DC-1		
— at 24 V Rated value	Α	20
— at 110 V Rated value	Α	2.1
• at DC-3 at DC-5		
— at 24 V Rated value	Α	20
— at 110 V Rated value	Α	0.15
Operating current with 2 current paths in series		
• at DC-1		
— at 24 V Rated value	Α	20
— at 110 V Rated value	Α	12
• at DC-3 at DC-5		
— at 110 V Rated value	Α	0.35
— at 24 V Rated value	Α	20
Operating current with 3 current paths in series		
• at DC-1		
— at 24 V Rated value	Α	20
— at 110 V Rated value	Α	20
• at DC-3 at DC-5		
— at 110 V Rated value	Α	20
— at 24 V Rated value	Α	20
Operating power		
• at AC-1 at 400 V Rated value	kW	13
• at AC-2 at 400 V Rated value	kW	4
● at AC-4 at 400 V Rated value	W	4 000
Operating power		
• at AC-3		
— at 400 V Rated value	kW	4
— at 500 V Rated value	kW	4.5
— at 690 V Rated value	kW	5.5
Control circuit/ Control:		
Type of voltage of the control supply voltage		DC
Control supply voltage for DC		
Rated value	V	24

Operating range factor control supply voltage rated value of the magnet coil for DC		0.85 1.1
Closing power of the magnet coil for DC	W	3.3
Holding power of the magnet coil for DC	W	3.3

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>		
<ul><li>instantaneous contact</li></ul>		1
Operating current at AC-15		
• at 230 V Rated value	Α	6
● at 400 V Rated value	Α	3
Operating current		
• at DC-12 at 220 V Rated value	Α	1
• at DC-13 at 220 V Rated value	Α	0.3
Operating current		
● at DC-12		
— at 60 V Rated value	Α	6
— at 110 V Rated value	Α	3
• at DC-13		
— at 24 V Rated value	Α	10
— at 60 V Rated value	Α	2
— at 110 V Rated value	Α	1
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>				
<ul> <li>— with type of assignment 1 required</li> </ul>		fuse gL/gG: 35 A		
<ul> <li>— with type of assignment 2 required</li> </ul>		fuse gL/gG: 20 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	mm	57.5		
Width	mm	45		
Depth	mm	72		
Required spacing				

• for grounded parts						
— at the side	mm	6				
Connections/ Terminals:	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-section						
• for main contacts						
— solid		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)				
— single or multi-stranded		2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), max. 2x (0,75 4 mm²)				
<ul> <li>finely stranded with core end processing</li> </ul>		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)				
<ul> <li>for AWG conductors for main contacts</li> </ul>		2x (20 16), 2x (18 14), 1x 12				
• for auxiliary contacts						
— solid		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)				
<ul> <li>finely stranded with core end processing</li> </ul>		2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)				
<ul> <li>for AWG conductors for auxiliary contacts</li> </ul>		2x (20 16), 2x (18 14), 1x 12				
Mechanical data:						
Size of contactor		\$00				
Ambient conditions:						
Installation altitude at height above sea level	m	2 000				
maximum						
Ambient temperature						
<ul><li>during operation</li></ul>	°C	-25 <b>+</b> 60				
Certificates/ approvals:						

## **General Product Approval**

Functional Safety/Safety of Machinery











DNV

other

Type Examination

Declaration of Conformity	Test Certificates		Shipping App	roval	
$C \in$	Special Test Certificate	other	ELICAN BUREPE	<b>L</b> Å	

Shi	ppina	a An	proval
	PPIII	9,4	piotai



EG-Konf.







ABS

Environmental Confirmations

Confirmation

GL

other

other

## Further information

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

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT10161BB41}$ 

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

http://support.automation.siemens.com/WW/view/en/3RT10161BB41/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT10161BB41&lang=en



