# **SIEMENS**

Data sheet 3RT1017-1BB41



CONTACTOR, AC-3 5.5KW/400V, 1NO DC 24 V, 3-POLE, SIZE S00, SCREW CONNECTION  $\,$ 

Figure similar

product brand name	SIRIUS
Product designation	power contactor

General technical data: Size of contactor	S00
Degree of pollution	3
Mechanical service life (switching cycles)	
• of the contactor typical	30 000 000
• of the contactor with added electronics-	5 000 000
compatible auxiliary switch block typical	
<ul> <li>of the contactor with added auxiliary switch</li> </ul>	10 000 000
block typical	
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	2 000 m	
maximum		
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	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	12 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	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	
<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	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
<ul> <li>with 3 current paths in series at DC-3 at DC-5</li> </ul>	
— at 110 V Rated value	20 A
— at 24 V Rated value	20 A
Active power loss at AC-3 at 400 V for rated value of	1.24 W
the operating current per conductor	
Control circuit/ Control:	
Type of voltage of the control supply voltage	DC
Control supply voltage for DC	
Rated value	24 V
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	3.3 W
Holding power of the magnet coil for DC	3.3 W

## 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 the auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)

		rci	

Design (	of the	fuse	lin	k
----------	--------	------	-----	---

• for short-circuit protection of the main circuit

— with type of assignment 1 required
 — with type of assignment 2 required
 fuse gL/gG: 35 A
 fuse gL/gG: 20 A
 fuse gL/gG: 10 A

required

Installation/ mounting/ dimensions:

installation/ 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	57.5 mm
Width	45 mm
Depth	72 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
 for auxiliary and control current circuit
 screw-type terminals

#### Type of connectable conductor cross-section

- for main contacts
  - solid
  - single or multi-stranded
  - finely stranded with core end processing
- for AWG conductors for main contacts

#### Type of connectable conductor cross-section

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

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>), max. 2x (0,75 ... 4 mm<sup>2</sup>)

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

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

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

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

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

## Certificates/ approvals:

## **General Product Approval**

Functional Safety/Safety of Machinery Declaration of Conformity









Type Examination



#### **Test Certificates**

## **Shipping Approval**

Special Test Certificate other





other



GI



LRS

## **Shipping Approval**







Environmental Confirmations

Confirmation

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

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10171BB41

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT10171BB41

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT10171BB41&lang=en



