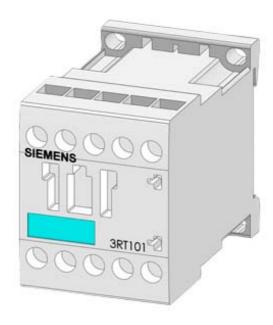
# **SIEMENS**

Data sheet 3RT1316-1BB40

CONTACTOR, AC-1, 12KW/400 V, AC-1 18 A, DC 24 V, 4-POLE, 4 NO, SIZE S00, SCREW CONNECTION



product brand name	SIRIUS
Product designation	power contactor
General technical data:	
Size of contactor	S00
Protection class IP	
• on the front	IP20
• of the terminal	IP20
Degree of pollution	3
Mechanical service life (switching cycles)	
<ul> <li>of 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
of the contactor with added auxiliary switch	10 000 000
block typical	
Ambient conditions:	
Installation altitude at height above sea level	2 000 m
maximum	
Ambient temperature	
<ul><li>during operation</li></ul>	-25 +60 °C

lain circuit:	
Number of NO contacts for main contacts	4
Number of NC contacts for main contacts	0
Operating current	
● at AC-1 at 400 V	
— at ambient temperature 40 °C rated value	18 A
● at AC-1 up to 690 V	
<ul> <li>at ambient temperature 40 °C rated value</li> </ul>	18 A
— at ambient temperature 60 °C rated value	16 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	18 A
— at 110 V rated value	2.1 A
• with 2 current paths in series at DC-1	
— at 24 V rated value	18 A
— at 110 V rated value	12 A
• with 3 current paths in series at DC-1	
— at 24 V rated value	18 A
— at 110 V rated value	18 A
Operating current	
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	18 A
— at 110 V rated value	0.15 A
• with 2 current paths in series at DC-3 at DC-5	
— at 110 V rated value	0.35 A
— at 24 V rated value	18 A
• with 3 current paths in series at DC-3 at DC-5	
— at 110 V rated value	18 A
— at 24 V rated value	18 A
Operating power	
• at AC-1	
— at 400 V rated value	12 kW
• at AC-2 at 400 V rated value	4 kW
• at AC-3	
— at 400 V rated value	4 kW
Power loss [W] at AC-3 at 400 V for rated value of	1.24 W
the operating current per conductor	
Combinal singuist Combinals	
Control circuit/ Control:  Type of voltage of the control supply voltage	DC

24 V
0.85 1.1
3.3 W
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>	
— 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)

# Short-circuit protection

Design	ı of	the	fu	se l	ink		
_							_

• for short-circuit protection of the main circuit

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

• for short-circuit protection of the auxiliary switch

required

fuse gL/gG: 20 A

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	57.5 mm
Width	45 mm
Depth	72 mm

#### Required spacing

• for grounded parts

- at the side

6 mm

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### Type of electrical connection

- for main current circuit
- for auxiliary and control current circuit
- Type of connectable conductor cross-sections
  - for main contacts
    - solid
    - single or multi-stranded
    - finely stranded with core end processing
  - at AWG conductors for main contacts
- Type of connectable conductor cross-sections

• for auxiliary contacts

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

screw-type terminals

screw-type terminals

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), 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

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











Baumusterbescheini gung

Declaration	of
Conformity	

# Test Certificates

### **Shipping Approval**



spezielle Prüfbescheinigunge





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Shipping	
Approval	

other

Bestätigungen

Umweltbestätigung

sonstig



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=3RT13161BB40

#### Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT13161BB40

# Service&Support (Manuals, Certificates, Characteristics, FAQs,...) <a href="https://support.industry.siemens.com/cs/ww/en/ps/3RT13161BB40">https://support.industry.siemens.com/cs/ww/en/ps/3RT13161BB40</a>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT13161BB40&lang=en

