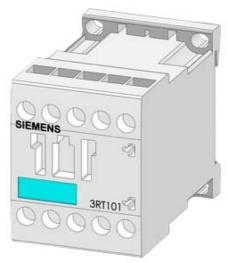
SIEMENS

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
Degree of pollution	3
Mechanical service life (switching cycles)	
• of the contactor typical	30 000 000
 of the contactor with added electronics- compatible auxiliary switch block typical 	5 000 000
 of the contactor with added auxiliary switch block typical 	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	2 000 m
maximum	
Ambient temperature	
during operation	-25 +60 °C
Main circuit:	
Number of poles for main current circuit	4
Number of NC contacts for main contacts	0

Number of NO contacts for main contacts	4
Operating current	
● at AC-1 at 400 V	
— at ambient temperature 40 °C Rated value	18 A
• at AC-1 up to 690 V	
— at ambient temperature 40 °C Rated value	18 A
— at ambient temperature 60 °C Rated value	16 A
• at AC-3	
— at 400 V Rated value	9 A
Operating current	
with 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	
with 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
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.	

Aux	ıllal y	CIIC	Juil.

Number of NC contacts

Contact reliability of the auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
• at 220 V Rated value	0.3 A
● at 110 V Rated value	1 A
• at 60 V Rated value	2 A
• at 24 V Rated value	10 A
Operating current at DC-13	
• at 220 V Rated value	1 A
• at 110 V Rated value	3 A
• at 60 V Rated value	6 A
Operating current at DC-12	
• at 400 V Rated value	3 A
• at 230 V Rated value	6 A
Operating current at AC-15	
Operating current at AC-12 maximum	10 A
— instantaneous contact	0
• for auxiliary contacts	
Number of NO contacts	
— instantaneous contact	0
 for auxiliary contacts 	

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Design of the fu	ıse link
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• for short-circuit protection of the main circuit

— with type of assignment 1 required

— with type of assignment 2 required

• for short-circuit protection of the auxiliary switch required

fuse gL/gG: 35 A

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
Side-by-side mounting	Yes
Height	57.5 mm
Width	45 mm
Depth	72 mm
Required spacing	
 for grounded parts 	
— at the side	6 mm

Connections/ Terminals:	
Type of electrical connection	
• for main current circuit	screw-type terminals
 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

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

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 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)

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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











Type Examination

Declaration of Conformity

Test Certificates **Shipping Approval**



Special Test Certificate









Shipping Approval

other



Confirmation

Environmental Confirmations 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=3RT13161BB40

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT13161BB40

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

