

Data sheet

3RT1025-1BB44-0AA1-Z W97

CONTACTOR, AC-3 7.5 KW/400 V, 24 V DC, 3-POLE, S0 MODULE,
2NO + 2NC, SCREW-CONNECTION, SNAP-ON MOUNT.
VARISTOR MULTIUNIT PACKING PACKING = 12 ITEMS

product brand name	SIRIUS
Product designation	power contactor

General technical data

Size of contactor	S0
Degree of pollution	3
Protection class IP	
• on the front	IP20
• of the terminal	IP20
Mechanical service life (switching cycles)	
• of contactor typical	10 000 000
• 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

Ambient conditions

Installation altitude at height above sea level maximum	2 000 m
Ambient temperature	
• during operation	-25 ... +60 °C

Main circuit

Number of poles for main current circuit	3
Number of NO contacts for main contacts	3
Number of NC contacts for main contacts	0
Operating current	
• at AC-1 at 400 V	
— at ambient temperature 40 °C rated value	40 A
• at AC-1	
— up to 690 V at ambient temperature 40 °C rated value	40 A
— up to 690 V at ambient temperature 60 °C rated value	35 A
• at AC-3	
— at 400 V rated value	17 A
Operating current	
• at 1 current path at DC-1	

— at 24 V rated value	35 A
— at 110 V rated value	4.5 A
• with 2 current paths in series at DC-1	
— at 24 V rated value	35 A
— at 110 V rated value	35 A
• with 3 current paths in series at DC-1	
— at 24 V rated value	35 A
— at 110 V rated value	35 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	2.5 A
• with 2 current paths in series at DC-3 at DC-5	
— at 110 V rated value	15 A
— at 24 V rated value	35 A
• with 3 current paths in series at DC-3 at DC-5	
— at 110 V rated value	35 A
— at 24 V rated value	35 A
Operating power	
• at AC-1	
— at 400 V rated value	23 kW
• at AC-2 at 400 V rated value	7.5 kW
• at AC-3	
— at 400 V rated value	7.5 kW
— at 500 V rated value	10 kW
— at 690 V rated value	11 kW
Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor	0.9 W

Control circuit/ Control

Type of voltage of the control supply voltage	DC
Control supply voltage at DC	
• rated value	24 V
Operating range factor control supply voltage rated value of magnet coil at DC	0.8 ... 1.1
Closing power of magnet coil at DC	5.4 W
Holding power of magnet coil at DC	5.4 W

Auxiliary circuit

Number of NC contacts	
• for auxiliary contacts	
— instantaneous contact	2
Number of NO contacts	

• for auxiliary contacts — instantaneous contact	2
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 — with type of assignment 2 required	fuse gL/gG: 63 A fuse gL/gG: 25 A fuse gL/gG: 10 A
• for short-circuit protection of the auxiliary switch required	

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	85 mm
Width	45 mm
Depth	150 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-sections	
• for main contacts — solid — single or multi-stranded	2x (1 ... 2.5 mm ²), 2x (2.5 ... 6 mm ²), max. 2x 10 mm ² 2x (1 ... 2,5 mm ²), 2x (2,5 ... 6 mm ²), max. 2x 10 mm ²

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

2x (1 ... 2.5 mm²), 2x (2.5 ... 6 mm²)

2x (16 ... 12), 2x (14 ... 10), 1x 8

Type of connectable conductor cross-sections

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

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

Certificates/approvals

General Product Approval



CCC



CSA



EG-Konf.

Declaration of Conformity

Test Certificates

[spezielle
Prüfbescheinigungen](#)
[n](#)

[Typprüfbescheinigung/Werkszeugnis](#)

Shipping Approval



ABS



BUREAU
VERITAS



DNV



GL



LRS



RINA

Shipping Approval

other



RMRS

[sonstig](#)

[Umweltbestätigung](#)

[Bestätigungen](#)

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=3RT1025-1BB44-0AA1-Z W97>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1025-1BB44-0AA1-Z W97>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1025-1BB44-0AA1-Z W97>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1025-1BB44-0AA1-Z W97&lang=en

last modified:

09/20/2016