## **SIEMENS**

Data sheet 3RT1025-1BB40

Power contactor, AC-3 17 A, 7.5 kW / 400 V 24 V DC, 3-pole, Size S0 Screw terminal !!! Phased-out product !!! Successor is SIRIUS 3RT2 Preferred successor type is >>3RT2025-1BB40<<



Figure similar

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	IP00
Mechanical service life (switching cycles)	
of contactor typical	10 000 000
<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
Reference code acc. to DIN EN 81346-2	Q

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	
<ul> <li>up to 690 V at ambient temperature 40 °C rated value</li> </ul>	40 A
<ul> <li>up to 690 V at ambient temperature 60 °C rated value</li> </ul>	35 A
• at AC-3	
— at 400 V rated value	17 A
• at AC-4 at 400 V rated value	15.5 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
<ul> <li>with 2 current paths in series at DC-1</li> </ul>	
— at 24 V rated value	35 A
— at 110 V rated value	35 A
<ul> <li>with 3 current paths in series at DC-1</li> </ul>	
— 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 24 V rated value	35 A
— at 110 V rated value	15 A
• with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value	35 A
— at 110 V rated value	35 A
Operating power	
• at AC-1	
— at 400 V rated value	23 kW

7.5 kW
7.5 kW
10 kW
11 kW
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	
● initial value	0.8
Full-scale value	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	0
Number of NO contacts for auxiliary contacts	
• 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 of the fuse link	
• for short-circuit protection of the main circuit	
<ul> <li>— with type of coordination 1 required</li> </ul>	fuse gL/gG: 63 A
<ul> <li>— with type of assignment 2 required</li> </ul>	fuse gL/gG: 25 A

• for short-circuit protection of the auxiliary switch required

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	85 mm
Width	45 mm
Depth	101 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	screw-type terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>	screw-type terminals
Type of connectable conductor cross-sections	
• for main contacts	
— solid	2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²
<ul> <li>single or multi-stranded</li> </ul>	2x (1 2,5 mm²), 2x (2,5 6 mm²), max. 2x 10 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 2.5 mm²), 2x (2.5 6 mm²)
<ul> <li>at AWG conductors for main contacts</li> </ul>	2x (16 12), 2x (14 10), 1x 8
Type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
— 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>at AWG conductors for auxiliary contacts</li> </ul>	2x (20 16), 2x (18 14), 1x 12

## Certificates/ approvals

## **General Product Approval**

Functional Safety/Safety of Machinery Declaration of Conformity









Type Examination
Certificate



Declaration of	Test Certificates	Marine / Shipping
Conformity		

Miscellaneous

Special Test Certificate

Type Test Certificates/Test Report

Miscellaneous





Marine / Shipping

other

Railway

Special Test Certi-







Miscellaneous

Confirmation

Special Test Certificate

## Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

www.siemens.com/sirius/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1025-1BB40

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT1025-1BB40}$ 

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT1025-1BB40

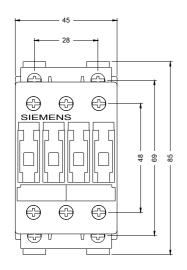
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RT1025-1BB40&lang=en

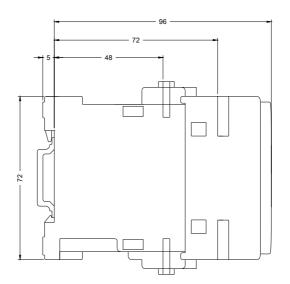
Characteristic: Tripping characteristics, I2t, Let-through current

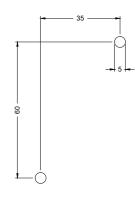
https://support.industry.siemens.com/cs/ww/en/ps/3RT1025-1BB40/char

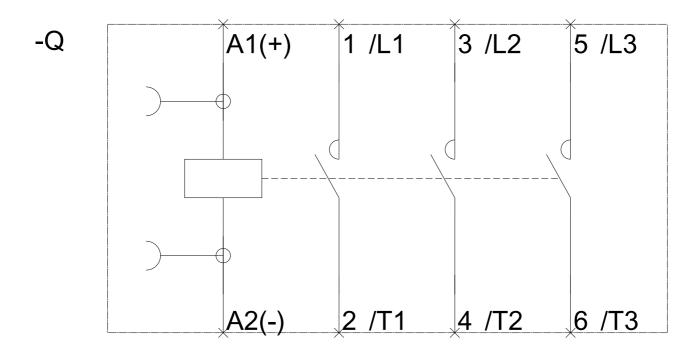
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1025-1BB40&objecttype=14&gridview=view1









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