SIEMENS

Data sheet 3RT1015-1BB42

Power contactor, AC-3 7 A, 3 kW / 400 V 1 NC, 24 V DC 3-pole, Size S00 Screw terminal !!! Phased-out product !!! Successor is SIRIUS 3RT2 Preferred successor type is >>3RT2015-1BB42<<



Figure similar

Product brand name	SIRIUS
Product designation	power contactor
General technical data	
Size of contactor	S00
Degree of pollution	3
Protection class IP	
• on the front	IP20
• of the terminal	IP20
Mechanical service life (switching cycles)	
of 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
Reference code acc. to DIN EN 81346-2	Q
Ambient conditions	

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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 	18 A
● at AC-1	
— up to 690 V at ambient temperature 40 $^{\circ}\text{C}$ rated value	18 A
 up to 690 V at ambient temperature 60 °C rated value 	16 A
• at AC-3	
— at 400 V rated value	7 A
• at AC-4 at 400 V rated value	6.5 A
Operating current	
• at 1 current path at DC-1	
— at 24 V rated value	15 A
— at 110 V rated value	1.5 A
 with 2 current paths in series at DC-1 	
— at 24 V rated value	15 A
— at 110 V rated value	8.4 A
 with 3 current paths in series at DC-1 	
— at 24 V rated value	15 A
— at 110 V rated value	15 A
Operating current	
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	15 A
— at 110 V rated value	0.1 A
• with 2 current paths in series at DC-3 at DC-5	
— at 24 V rated value	15 A
— at 110 V rated value	0.25 A
• with 3 current paths in series at DC-3 at DC-5	
— at 24 V rated value	15 A
— at 110 V rated value	15 A
Operating power	
• at AC-1	
— at 400 V rated value	11 kW

• at AC-2 at 400 V rated value	3 kW
• at AC-3	
— at 400 V rated value	3 kW
— at 500 V rated value	3.5 kW
— at 690 V rated value	4 kW
Power loss [W] at AC-3 at 400 V for rated value of	0.42 W
the operating current per conductor	

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	0.85	
Full-scale value	1.1	
Closing power of magnet coil at DC	3.3 W	
Holding power of magnet coil at DC	3.3 W	

Auxiliary circuit	
Number of NC contacts for auxiliary contacts	
• instantaneous contact	1
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		
 — with type of coordination 1 required 	fuse gL/gG: 35 A	
— with type of assignment 2 required	fuse gL/gG: 20 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	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-sections	
• for main contacts	
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)
 single or multi-stranded 	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), max. 2x (0,75 4 mm²)
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 at AWG conductors for main contacts 	2x (20 16), 2x (18 14), 1x 12
Type of connectable conductor cross-sections	
 for auxiliary contacts 	
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 at AWG conductors for auxiliary contacts 	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

Confirmation











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=3RT1015-1BB42

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1015-1BB42

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT1015-1BB42

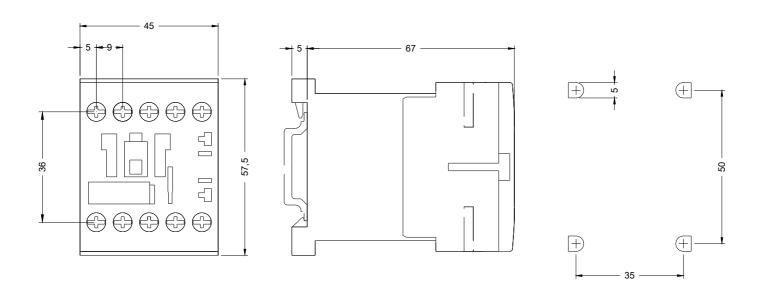
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1015-1BB42&lang=en

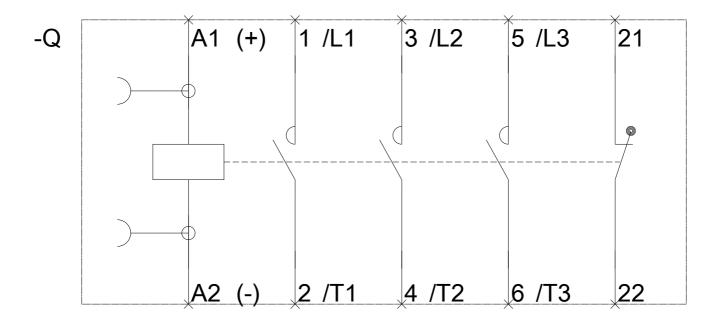
Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT1015-1BB42/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1015-1BB42&objecttype=14&gridview=view1





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