Data sheet

Power contactor, AC-3 12 A, 5.5 kW / 400 V 24 V DC 3-pole, 2 NO + 2 NC, Size S0 Screw terminal Upright mounting position !!! Phased-out product !!! Successor is SIRIUS 3RT2



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
 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

Installation altitude at height above sea level

• maximum	2 000 m
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 $^{\circ}\text{C}$ rated value	40 A
— up to 690 V at ambient temperature 60 $^{\circ}$ C rated value	35 A
• at AC-3	
— at 400 V rated value	12 A
• at AC-4 at 400 V rated value	12.5 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
 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 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
• at AC-2 at 400 V rated value	5.5 kW
• at AC-3	

— at 400 V rated value	5.5 kW
— at 500 V rated value	7.5 kW
— at 690 V rated value	7.5 kW
Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor	0.5 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	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 	fuse gL/gG: 63 A
— with type of assignment 2 required	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
 Mounting type 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	2x (1 2.5 mm²), 2x (2.5 6 mm²), max. 2x 10 mm²
 single or multi-stranded 	2x (1 2,5 mm²), 2x (2,5 6 mm²), max. 2x 10 mm²
— finely stranded with core end processing	2x (1 2.5 mm²), 2x (2.5 6 mm²)
 at AWG conductors for main contacts 	2x (16 12), 2x (14 10), 1x 8
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	of
Conformity	

Test Certificates

Marine / Shipping

Miscellaneous

Type Test Certificates/Test Report

Special Test Certificate







Marine / Shipping

other



Confirmation

Miscellaneous

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=3RT1024-1BB44-1AA0

Cax online generator

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

https://support.industry.siemens.com/cs/ww/en/ps/3RT1024-1BB44-1AA0

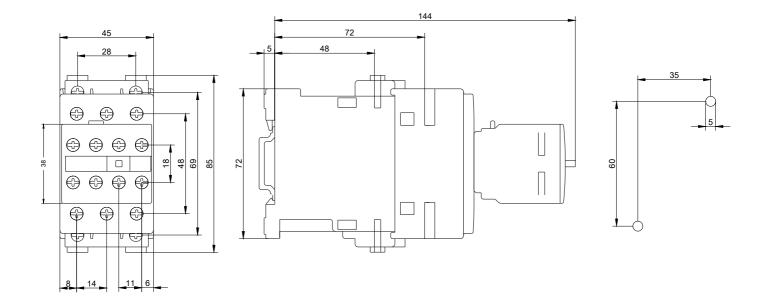
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1024-1BB44-1AA0&lang=en

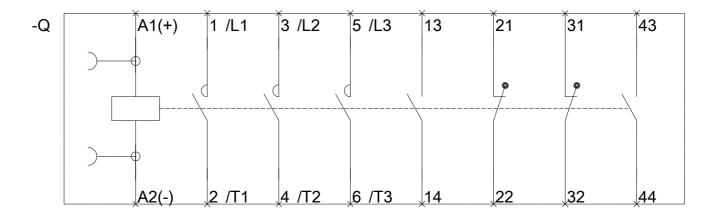
Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RT1024-1BB44-1AA0/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1024-1BB44-1AA0&objecttype=14&gridview=view1





last modified: 04/18/2019