

CONTACTOR, AC-3 18.5 KW/400 V, DC 24 V, 3-POLE, SIZE S2,
SCREW CONNECTION REUSABLE PACKING PACKING = 24
ITEMS

product brandname	SIRIUS
Product designation	power contactor

General technical data

Size of contactor	S2
Insulation voltage • rated value	690 V
Degree of pollution	3
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation • between coil and main contacts acc. to EN 60947-1	400 V
Protection class IP • on the front • of the terminal	IP00 IP00
Shock resistance • at rectangular impulse — at DC • with sine pulse — at DC	10g / 5 ms, 5g / 10 ms 15g / 5 ms, 8g / 10 ms
Mechanical service life (switching cycles) • of contactor typical • of the contactor with added electronics-compatible auxiliary switch block typical • of the contactor with added auxiliary switch block typical	10 000 000 5 000 000 10 000 000

Ambient conditions

Installation altitude at height above sea level maximum	2 000 m
Ambient temperature • during operation • during storage	-25 ... +60 °C -55 ... +80 °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	60 A
• at AC-1 — up to 690 V at ambient temperature 40 °C rated value	60 A
— up to 690 V at ambient temperature 60 °C rated value	55 A
• at AC-3 — at 400 V rated value	40 A
— at 690 V rated value	24 A
Connectable conductor cross-section in main circuit at AC-1	
• at 60 °C minimum permissible	16 mm ²
• at 40 °C minimum permissible	16 mm ²
Operating current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	18.5 A
• at 690 V rated value	12.6 A
Operating current	
• at 1 current path at DC-1 — at 24 V rated value	55 A
— at 110 V rated value	4.5 A
• with 2 current paths in series at DC-1 — at 24 V rated value	55 A
— at 110 V rated value	25 A
• with 3 current paths in series at DC-1 — at 24 V rated value	55 A
— at 110 V rated value	55 A
Operating current	
• at 1 current path at DC-3 at DC-5 — at 24 V rated value	35 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	25 A
— at 24 V rated value	55 A
• with 3 current paths in series at DC-3 at DC-5 — at 110 V rated value	55 A
— at 24 V rated value	55 A
Operating power	
• at AC-1 — at 230 V at 60 °C rated value	22 kW

— at 400 V rated value	38 kW
— at 690 V rated value	66 kW
— at 690 V at 60 °C rated value	66 kW
• at AC-2 at 400 V rated value	18.5 kW
• at AC-3	
— at 230 V rated value	11 kW
— at 400 V rated value	18.5 kW
— at 500 V rated value	22 kW
— at 690 V rated value	22 kW
Operating power for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	9.5 kW
• at 690 V rated value	11.4 kW
Thermal short-time current limited to 10 s	400 A
Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor	2.6 W
No-load switching frequency	
• at DC	1 500 1/h
Operating frequency	
• at AC-1 maximum	1 200 1/h
• at AC-2 maximum	600 1/h
• at AC-3 maximum	1 000 1/h
• at AC-4 maximum	300 1/h
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	13.3 W
Holding power of magnet coil at DC	13.3 W
Closing delay	
• at DC	60 ... 100 ms
Opening delay	
• at DC	20 ... 25 ms
Arcing time	10 ... 15 ms
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)

UL/CSA ratings

Contact rating of auxiliary contacts according to UL	A600 / Q600
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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: 125 A
— with type of assignment 2 required	fuse gL/gG: 63 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	112 mm
Width	55 mm
Depth	130 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 (0.75 ... 16 mm ²)

- stranded 2x (0.75 ... 25 mm²)
- single or multi-stranded 2x (0,75 ... 16 mm²)
- finely stranded with core end processing 2x (0.75 ... 16 mm²)
- finely stranded without core end processing 2x (0.75 ... 16 mm²)
- at AWG conductors for main contacts 2x (18 ... 2)

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



EG-Konf.

Declaration of Conformity

Test Certificates

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Prüfbescheinigunge
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Shipping Approval



ABS



DNV



GL



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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=3RT1035-1BB40-Z X95>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1035-1BB40-Z X95>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1035-1BB40-Z X95>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1035-1BB40-Z X95&lang=en

last modified:

10/19/2016