

CONTACTOR, AC-3, 15KW/400V DC 24V, 0.7...1.25*US, 3-POLE
SIZE S2, CAGE CLAMP CONNECTION WITH SOLID-STATE
CONTROL BLOCK VARISTOR INTEGRATED

product brand name	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	-40 ... +70 °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	50 A
• at AC-1 — up to 690 V at ambient temperature 40 °C rated value — up to 690 V at ambient temperature 60 °C rated value	50 A 45 A
• at AC-3 — at 400 V rated value — at 690 V rated value	32 A 20 A
Connectable conductor cross-section in main circuit at AC-1	
• at 60 °C minimum permissible • at 40 °C minimum permissible	10 mm ² 16 mm ²
Operating current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value • at 690 V rated value	15.6 A 11 A
Operating current	
• at 1 current path at DC-1 — at 24 V rated value — at 110 V rated value • with 2 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value • with 3 current paths in series at DC-1 — at 24 V rated value — at 110 V rated value	45 A 4.5 A 45 A 25 A 45 A 45 A
Operating current	
• at 1 current path at DC-3 at DC-5 — at 24 V rated value — at 110 V rated value • with 2 current paths in series at DC-3 at DC-5 — at 110 V rated value — at 24 V rated value • with 3 current paths in series at DC-3 at DC-5 — at 110 V rated value — at 24 V rated value	35 A 2.5 A 25 A 45 A 45 A 45 A
Operating power	
• at AC-1 — at 230 V at 60 °C rated value	18 kW

— at 400 V rated value	31 kW
— at 690 V rated value	54 kW
— at 690 V at 60 °C rated value	54 kW
• at AC-2 at 400 V rated value	15 kW
• at AC-3	
— at 230 V rated value	7.5 kW
— at 400 V rated value	15 kW
— at 500 V rated value	18.5 kW
— at 690 V rated value	18.5 kW
Operating power for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	8.2 kW
• at 690 V rated value	10 kW
Thermal short-time current limited to 10 s	320 A
Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor	1.8 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	750 1/h
• at AC-3 maximum	1 000 1/h
• at AC-4 maximum	250 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	0.7 ... 1.25
Design of the surge suppressor	with varistor
Closing power of magnet coil at DC	15 W
Holding power of magnet coil at DC	11 W
Closing delay	
• at DC	50 ... 95 ms
Opening delay	
• at DC	20 ... 30 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 — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required	fuse gL/gG: 125 A fuse gL/gG: 63 A 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	142 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	spring-loaded terminals
Type of connectable conductor cross-sections	
• for main contacts	

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

Type of connectable conductor cross-sections

• for auxiliary contacts	
— solid	2x (0.25 ... 2.5 mm ²)
— finely stranded with core end processing	2x (0.25 ... 1.5 mm ²)
— finely stranded without core end processing	2x (0.25 ... 2.5 mm ²)
• at AWG conductors for auxiliary contacts	2x (24 ... 14)

Certificates/approvals

General Product Approval

Declaration of Conformity

Test Certificates



[Typprüfbescheinigung/Werkszeugnis](#)

Test Certificates

Shipping Approval

other

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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=3RT1034-3XB40-0LA2>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1034-3XB40-0LA2>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1034-3XB40-0LA2>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1034-3XB40-0LA2&lang=en

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