Data sheet

CONTACTOR, AC-3, 15KW/400V, 24V AC 50/60HZ, 3-POLE, SIZE S2, SCREW TERMINAL MULTI-UNIT PACKAGING PACK = 30 UNITS



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 	400 V
60947-1	
Protection class IP	
• on the front	IP00
of the terminal	IP00
Shock resistance	
 at rectangular impulse 	
— at AC	10g / 5 ms, 5g / 10 ms
• with sine pulse	
— at AC	15g / 5 ms, 8g / 10 ms

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 	10 000 000
block typical	

Ambient conditions	
Installation altitude at height above sea level	2 000 m
maximum	
Ambient temperature	
during operation	-25 +60 °C
during storage	-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 	50 A
 up to 690 V at ambient temperature 60 °C rated value 	45 A
• at AC-3	
— at 400 V rated value	32 A
— at 690 V rated value	20 A
Connectable conductor cross-section in main circuit at AC-1	
• at 60 °C minimum permissible	10 mm²
• at 40 °C minimum permissible	16 mm²
Operating current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	15.6 A
• at 690 V rated value	11 A
Operating current	
• at 1 current path at DC-1	
— at 24 V rated value	45 A
— at 110 V rated value	4.5 A
 with 2 current paths in series at DC-1 	
— at 24 V rated value	45 A
— at 110 V rated value	25 A

 with 3 current paths in series at DC-1 	
— at 24 V rated value	45 A
— at 110 V rated value	45 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	45 A
 with 3 current paths in series at DC-3 at DC-5 	
— at 110 V rated value	45 A
— at 24 V rated value	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 AC	5 000 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	AC
Control supply voltage at AC	

at 50 Hz rated value	24 V
at 60 Hz rated value at 60 Hz rated value	24 V
Control supply voltage frequency 1 rated value	50 Hz
Control supply voltage frequency 2 rated value	60 Hz
Operating range factor control supply voltage rated	
value of magnet coil at AC	
● at 50 Hz	0.8 1.1
● at 60 Hz	0.85 1.1
Apparent pick-up power of magnet coil at AC	127 V·A
Inductive power factor with closing power of the coil	0.73
Apparent holding power of magnet coil at AC	11.3 V·A
Inductive power factor with the holding power of the	0.41
coil	
Closing delay	
• at AC	11 30 ms
Opening delay	
• at AC	7 20 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

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	112 mm
Width	55 mm
Depth	115 mm
Required spacing	
 for grounded parts 	
— at the side	6 mm

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

Connections/Terminals

— solid
 — stranded
 2x (0.75 ... 16 mm²)
 2x (0.75 ... 25 mm²)

— single or multi-stranded
 — finely stranded with core end processing
 2x (0,75 ... 16 mm²)
 2x (0.75 ... 16 mm²)

— finely stranded without core end 2x (0.75 ... 16 mm²) processing

• 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

Declaration of Conformity

Test Certificates

Shipping Approval







Typprüfbescheinigu ng/Werkszeugnis

spezielle Prüfbescheinigunge

n



other

Shipping Approval





Lloyd's Register





Bestätigungen

other

Umweltbestätigung

sonstig

Further information

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

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

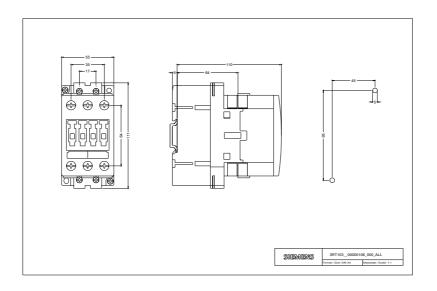
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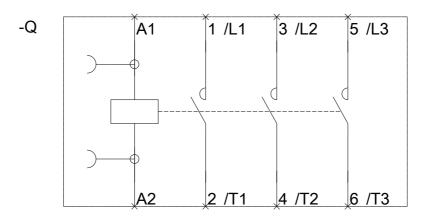
Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1034-1AC20-Z W95

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT1034-1AC20-Z W95

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1034-1AC20-Z W95&lang=en





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