



CONTACTOR, AC-3 18.5 KW/400 V, AC 110V 50/60HZ, 3-POLE,
SIZE S2, SCREW CONNECTION

Figure similar	
product brand name	SIRIUS
Product designation	power contactor
General technical data:	
Insulation voltage	
• Rated value	690 V
Degree of pollution	3
Surge voltage resistance Rated value	6 kV
Mechanical service life (switching cycles)	
• of the 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
Thermal short-time current restricted to 10 s	400 A
Protection class IP	
• on the front	IP00
• of the terminal	IP00
Equipment marking	
• acc. to DIN EN 61346-2	Q
• acc. to DIN EN 81346-2	Q
Main circuit:	
Number of poles for main current circuit	3
Number of NC contacts for main contacts	0
Number of NO contacts for main contacts	3
Operating current	

• at AC-1 — at 400 V at ambient temperature 40 °C Rated value — up to 690 V at ambient temperature 40 °C Rated value — up to 690 V at ambient temperature 60 °C Rated value • at AC-3 — at 400 V Rated value — at 690 V Rated value • at AC-4 at 400 V Rated value	60 A 60 A 55 A 40 A 24 A 35 A
Operating current with 1 current path • at DC-1 — at 24 V Rated value — at 110 V Rated value • at DC-3 at DC-5 — at 24 V Rated value — at 110 V Rated value	55 A 4.5 A 35 A 2.5 A
Operating current with 2 current paths in series • at DC-1 — at 24 V Rated value — at 110 V Rated value • at DC-3 at DC-5 — at 110 V Rated value — at 24 V Rated value	55 A 25 A 25 A 55 A
Operating current with 3 current paths in series • at DC-1 — at 24 V Rated value — at 110 V Rated value • at DC-3 at DC-5 — at 110 V Rated value — at 24 V Rated value	55 A 55 A 55 A 55 A
Operating power • at AC-1 — at 230 V at 60 °C Rated value — at 690 V at 60 °C Rated value	22 kW 66 kW
Operating power for ≥ 200000 operating cycles at AC-4 • at 400 V Rated value • at 690 V Rated value	9.5 kW 11.4 kW
Active power loss at AC-3 at 400 V for rated value of the operating current per conductor	2.6 W

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
No-load switching frequency	
• with AC	5 000 1/h

Control circuit/ Control:

Type of voltage of the control supply voltage	AC
Control supply voltage with AC	
• at 50 Hz Rated value	110 V
• at 60 Hz Rated value	110 V
• Rated value	50 Hz
Control supply voltage frequency 2 Rated value	60 Hz
Operating range factor control supply voltage rated value of the magnet coil with AC	
• at 50 Hz	0.8 ... 1.1
• at 60 Hz	0.85 ... 1.1

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-15	
• at 230 V Rated value	6 A
• at 400 V Rated value	3 A
Contact reliability of the auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)

UL/CSA ratings:

Contact rating of the auxiliary contacts acc. to UL	A600 / Q600
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Short-circuit:

Design of the fuse link	
• for short-circuit protection of the main circuit	
— with type of assignment 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
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• Side-by-side mounting	Yes
Height	112 mm
Width	55 mm
Depth	115 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-section	
• 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)
• for AWG conductors for main contacts	2x (18 ... 2)
• for auxiliary contacts	
— solid	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²), max. 2x (0.75 ... 4 mm ²)
— finely stranded with core end processing	2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
• for AWG conductors for auxiliary contacts	2x (20 ... 16), 2x (18 ... 14), 1x 12

Mechanical data:

Size of contactor	S2
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Ambient conditions:

Installation altitude at height above sea level maximum	2 000 m
Ambient temperature	
• during operation	-25 ... +60 °C
• during storage	-55 ... +80 °C

Certificates/ approvals:

General Product Approval	Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates
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CSA



UL



[Type Examination](#)



EG-Konf.

[Type Test Certificates/Test Report](#)

Test Certificates	Shipping Approval
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[Special Test Certificate](#)



ABS



DNV



GL



LRS



RINA

Shipping Approval	other
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RMRS

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Further information

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

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

Industry Mall (Online ordering system)

<http://www.siemens.com/industrymall>

Cax online generator

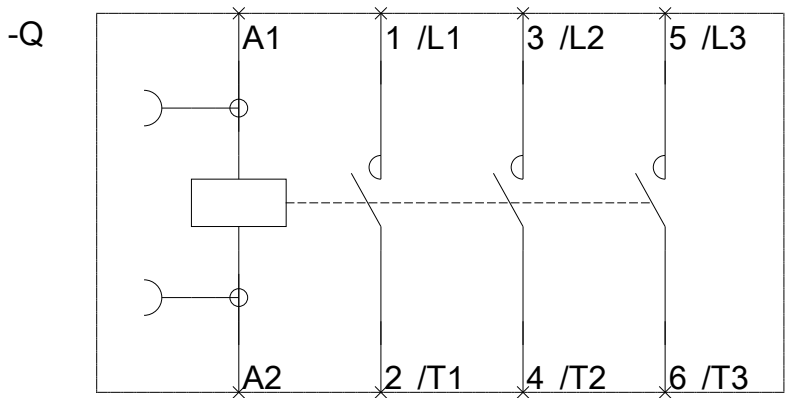
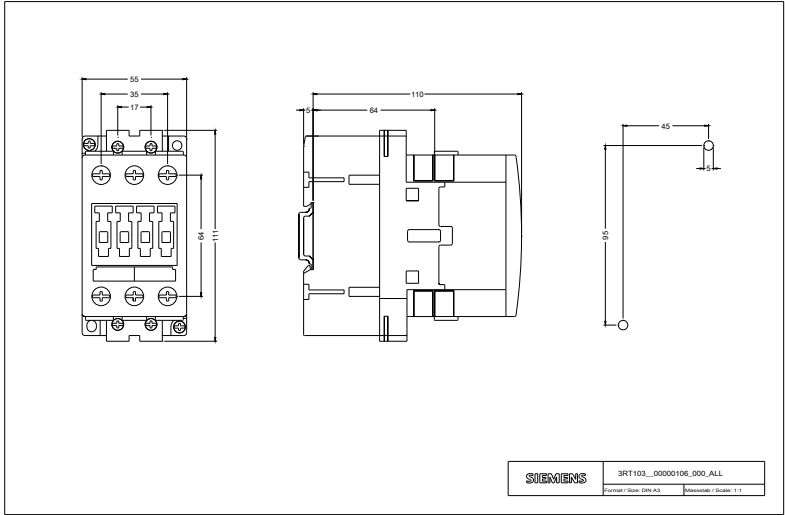
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT10351AG20>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT10351AG20>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT10351AG20&lang=en



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