



CONTACTOR, AC-3 45 KW/400 V,
AC 230V 50/60HZ 3-POLE, SIZE S3,
SCREW CONNECTION

General technical data:		
product brand name		SIRIUS
Size of the contactor		S3
Protection class IP / on the front		IP20
Degree of pollution		3
Installation altitude / at a height over sea level / maximum	m	2,000
Ambient temperature / during operating	°C	-25 ... +60
Mechanical operating cycles as operating time		
<ul style="list-style-type: none"> • of the contactor / typical 		10,000,000
<ul style="list-style-type: none"> • of the contactor with added auxiliary switch block / typical 		10,000,000
<ul style="list-style-type: none"> • of the contactor with added electronics-compatible auxiliary switch block / typical 		5,000,000
Main circuit:		
Number of NC contacts / for main contacts		0
Number of NO contacts / for main contacts		3
Operating current		
<ul style="list-style-type: none"> • at AC-1 / at 400 V <ul style="list-style-type: none"> • at 40 °C ambient temperature / rated value 	A	120
<ul style="list-style-type: none"> • at 60 °C ambient temperature / rated value 	A	100
<ul style="list-style-type: none"> • at AC-3 / at 400 V / rated value 	A	95

• at AC-4 / at 400 V / rated value	A	80
• with 1 current path / at DC-1		
• at 24 V / rated value	A	100
• at 110 V / rated value	A	9
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	A	100
• at 110 V / rated value	A	100
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	A	100
• at 110 V / rated value	A	100
• with 1 current path / at DC-3 / at DC-5		
• at 24 V / rated value	A	40
• at 110 V / rated value	A	2.5
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	A	100
• at 110 V / rated value	A	100
• with 3 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	A	100
• at 110 V / rated value	A	100
Service power		
• at AC-2 / at 400 V / rated value	kW	45
• at AC-3 / at 400 V / rated value	kW	45
• at AC-4 / at 400 V / rated value	W	45,000

Control circuit:		
Type of voltage / of the controlled supply voltage		AC
Operating range factor control supply voltage rated value / of the magnet coil		
• at 50 Hz		
• for AC		0.8 ... 1.1
• at 60 Hz		
• for AC		0.8 ... 1.1
Apparent pull-in power / of the solenoid / for AC	V·A	298
Apparent holding power / of the solenoid / for AC	V·A	27
Inductive power factor / with the pull-in power of the coil		0.7
Inductive power factor / with the pull-in power of the coil		0.29

Auxiliary circuit:		
Contact reliability / of the auxiliary contacts		1 faulty switching per 100 million (17 V, 1 mA)
Number of NC contacts / for auxiliary contacts / instantaneous switching		0

Number of NO contacts / for auxiliary contacts / instantaneous switching	0
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Short-circuit:

Design of the fuse link		
<ul style="list-style-type: none"> • for short-circuit protection of the auxiliary switch / required 		fuse gL/gG: 10 A
<ul style="list-style-type: none"> • for short-circuit protection of the main circuit 		fuse gL/gG: 250 A
<ul style="list-style-type: none"> • with type of assignment 1 / required 		fuse gL/gG: 160 A
<ul style="list-style-type: none"> • at type of coordination 2 / required 		

Installation/mounting/dimensions:

Type of mounting		screw and snap-on mounting onto 35 mm and 75 mm standard mounting rail
series installation		Yes
Width	mm	70
Height	mm	146
Depth	mm	139
Distance, to be maintained, to earthed part / sideways	mm	6

Connection type:

Design of the electrical connection		
<ul style="list-style-type: none"> • for main current circuit 		screw-type terminals
<ul style="list-style-type: none"> • for auxiliary and control current circuit 		screw-type terminals
Type of the connectable conductor cross-section		
<ul style="list-style-type: none"> • for main contacts 		
<ul style="list-style-type: none"> • solid 		2x (2.5 ... 16 mm ²)
<ul style="list-style-type: none"> • stranded 		2x (10 ... 50 mm ²)
<ul style="list-style-type: none"> • finely stranded 		
<ul style="list-style-type: none"> • with conductor end processing 		2x (2.5 ... 35 mm ²)
<ul style="list-style-type: none"> • without conductor final cutting 		2x (10 ... 35 mm ²)
<ul style="list-style-type: none"> • for AWG conductors / for main contacts 		2x (10 ... 1/0)
<ul style="list-style-type: none"> • for auxiliary contacts 		
<ul style="list-style-type: none"> • solid 		2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²), max. 2x (0.75 ... 4 mm ²)
<ul style="list-style-type: none"> • finely stranded 		
<ul style="list-style-type: none"> • with conductor end processing 		2x (0.5 ... 1.5 mm ²), 2x (0.75 ... 2.5 mm ²)
<ul style="list-style-type: none"> • for AWG conductors / for auxiliary contacts 		2x (20 ... 16), 2x (18 ... 14), 1x 12

Certificates/approvals:

General Product Approval

Functional Safety / Safety of Machinery



CCC



CSA



GOST



KETI



UL

[Type Examination](#)

Declaration of Conformity

Test Certificates



EG-Konf.

[Special Test
Certificate](#)

Shipping Approval



ABS



GL



LRS



RINA



RMRS

other

[Confirmation](#)

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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/industrial-controls/mall>

Cax online generator:

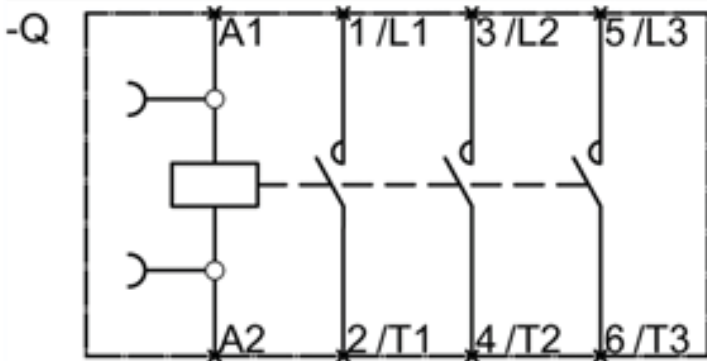
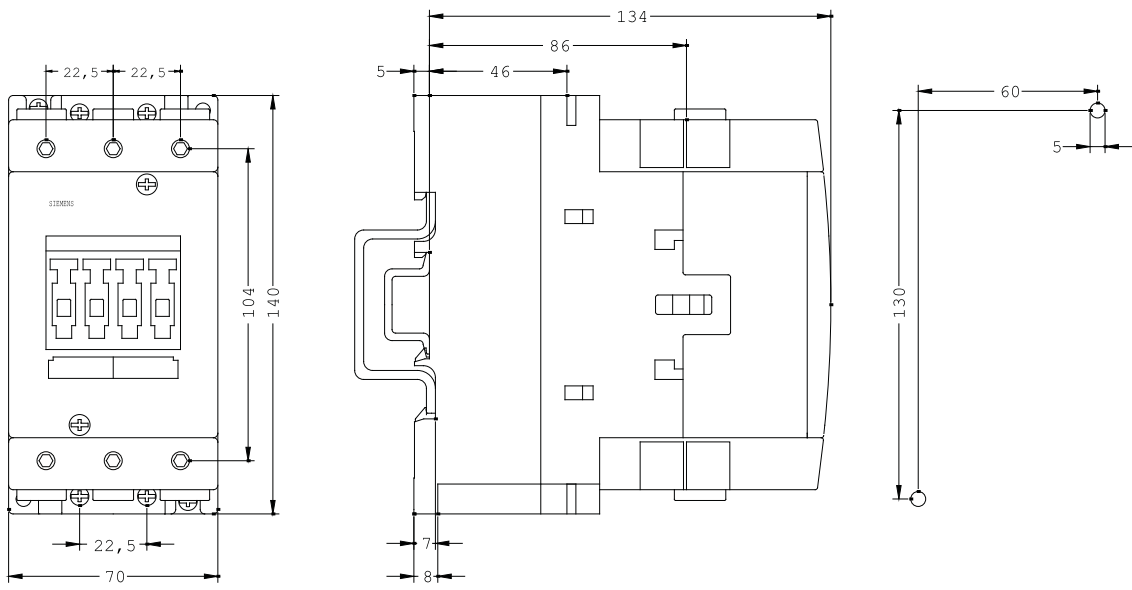
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RT1046-1AL20/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1046-1AL20



last change:

Aug 12, 2013