



CONTACTOR, AC-1 140 A / 400 V,
AC 110 V, 50 HZ / 120 V 60 HZ, 3-POLE,
SIZE S3, SCREW CONNECTION

General technical data:

product brand name		SIRIUS
Size of the contactor		S3
Protection class IP / on the front		IP00
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	140
<ul style="list-style-type: none"> • at AC-3 / at 400 V / rated value 	A	44
<ul style="list-style-type: none"> • with 1 current path / at DC-1 		

• at 24 V / rated value	A	130
• at 110 V / rated value	A	12
• with 2 current paths in series / at DC-1		
• at 24 V / rated value	A	130
• at 110 V / rated value	A	130
• with 3 current paths in series / at DC-1		
• at 24 V / rated value	A	130
• at 110 V / rated value	A	130
• with 1 current path / at DC-3 / at DC-5		
• at 24 V / rated value	A	6
• at 110 V / rated value	A	1.25
• with 2 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	A	130
• at 110 V / rated value	A	130
• with 3 current paths in series / at DC-3 / at DC-5		
• at 24 V / rated value	A	130
• at 110 V / rated value	A	130
Service power		
• at AC-2 / at 400 V / rated value	kW	22
• at AC-3 / at 400 V / rated value	kW	22

Control circuit:

Voltage type / of control feed voltage		AC
Operating range factor control supply voltage rated value / of the magnet coil		
• at 50 Hz		0.8 ... 1.1
• for AC		
• at 60 Hz		0.8 ... 1.1
• for AC		
Apparent pull-in power / of the solenoid / for AC	V·A	300
Apparent holding power / of the solenoid / for AC	V·A	21
Inductive power factor / with the pull-in power of the coil		0.52
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

Short-circuit:

Design of the fuse link	• for short-circuit protection of the auxiliary switch / required	fuse gL/gG: 10 A
	• for short-circuit protection of the main circuit	fuse gL/gG: 250 A
	• with type of assignment 1 / required	fuse gL/gG: 250 A
	• at type of coordination 2 / required	fuse gL/gG: 250 A

Installation/mounting/dimensions:

Mounting type		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	• for main current circuit	screw-type terminals
	• for auxiliary and control current circuit	screw-type terminals
Type of the connectable conductor cross-section	• for main contacts	
	• solid	2x (2.5 ... 16 mm ²)
	• stranded	2x (10 ... 50 mm ²)
	• finely stranded	
	• with conductor end processing	2x (2.5 ... 35 mm ²)
	• without conductor final cutting	2x (10 ... 35 mm ²)
	• for AWG conductors / for main contacts	2x (10 ... 1/0)
• 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 conductor 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	

Certificates/approvals:

General Product Approval

**Functional Safety /
Safety of
Machinery**

**Declaration of
Conformity**



CCC



CSA



UL

[Type Examination](#)



EG-Konf.

Test Certificates

Shipping Approval

[Special Test
Certificate](#)



ABS



GL



LRS



RINA



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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:

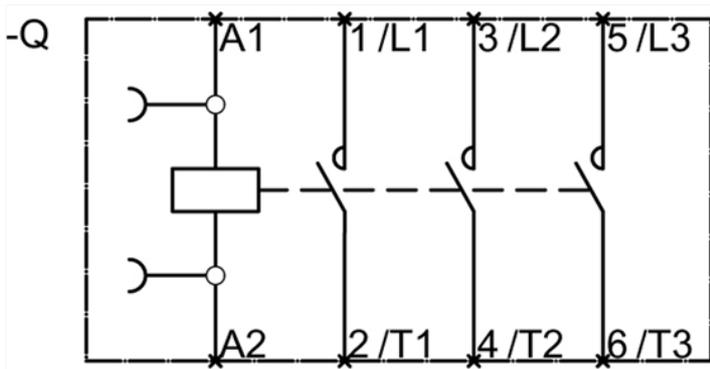
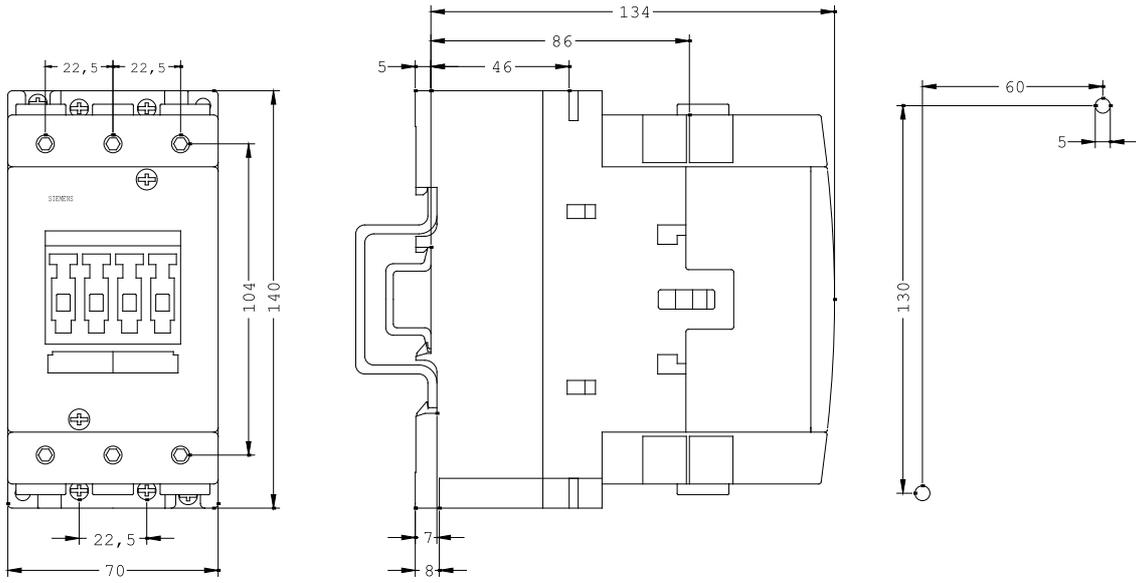
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RT1446-1AK60/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1446-1AK60



last change:

Jul 28, 2014