



CONTACTOR, AC-1 140 A,  
AC 48 V 50/60 HZ 4-POLE, SIZE S3,  
SCREW CONNECTION

### General technical data:

<b>product brand name</b>		SIRIUS
<b>Size of the contactor</b>		S3
<b>Protection class IP / on the front</b>		IP00
<b>Degree of pollution</b>		3
<b>Installation altitude / at a height over sea level / maximum</b>	m	2,000
<b>Ambient temperature / during operating</b>	°C	-25 ... +60
<b>Mechanical operating cycles as operating time</b>		
<ul style="list-style-type: none"> <li>• of the contactor / typical</li> </ul>		10,000,000
<ul style="list-style-type: none"> <li>• of the contactor with added auxiliary switch block / typical</li> </ul>		10,000,000
<ul style="list-style-type: none"> <li>• of the contactor with added electronics-compatible auxiliary switch block / typical</li> </ul>		5,000,000

### Main circuit:

<b>Number of NC contacts / for main contacts</b>		0
<b>Number of NO contacts / for main contacts</b>		4
<b>Operating current</b>		
<ul style="list-style-type: none"> <li>• at AC-1 / at 400 V <ul style="list-style-type: none"> <li>• at 40 °C ambient temperature / rated value</li> </ul> </li> </ul>	A	140
<ul style="list-style-type: none"> <li>• with 1 current path / at DC-1 <ul style="list-style-type: none"> <li>• at 24 V / rated value</li> </ul> </li> </ul>	A	80

- 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
- with 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 24 V / rated value
  - at 110 V / rated value
- with 3 current paths in series / at DC-3 / at DC-5
  - at 24 V / rated value
  - at 110 V / rated value

A	9
A	80
A	20
A	2.5
A	80

#### Control circuit:

<b>Voltage type / of control feed voltage</b>		AC
<b>Operating range factor control supply voltage rated value / of the magnet coil</b>		
<ul style="list-style-type: none"> <li>• at 50 Hz           <ul style="list-style-type: none"> <li>• for AC</li> </ul> </li> <li>• at 60 Hz           <ul style="list-style-type: none"> <li>• for AC</li> </ul> </li> </ul>		0.8 ... 1.1
		0.8 ... 1.1
<b>Apparent pull-in power / of the solenoid / for AC</b>	V·A	298
<b>Apparent holding power / of the solenoid / for AC</b>	V·A	27
<b>Inductive power factor / with the pull-in power of the coil</b>		0.7
<b>Inductive power factor / with the pull-in power of the coil</b>		0.29

#### Auxiliary circuit:

<b>Contact reliability / of the auxiliary contacts</b>		1 faulty switching per 100 million (17 V, 1 mA)
<b>Number of NC contacts / for auxiliary contacts / instantaneous switching</b>		0
<b>Number of NO contacts / for auxiliary contacts / instantaneous switching</b>		0

#### Short-circuit:

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

- at type of coordination 2 / required

fuse gL/gG: 160 A

### Installation/mounting/dimensions:

<b>Mounting type</b>		screw and snap-on mounting onto 35 mm and 75 mm standard mounting rail
<b>series installation</b>		Yes
<b>Width</b>	mm	93
<b>Height</b>	mm	146
<b>Depth</b>	mm	139
<b>Distance, to be maintained, to earthed part / sideways</b>	mm	6

### Connection type:

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



RMRS

other

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[other](#)

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

**Industry Mall (Online ordering system)**

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

**Cax online generator:**

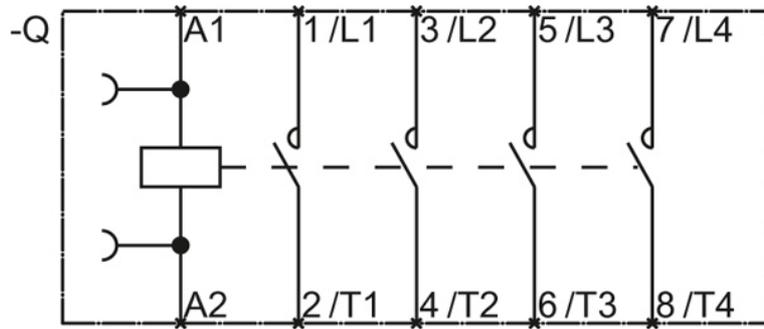
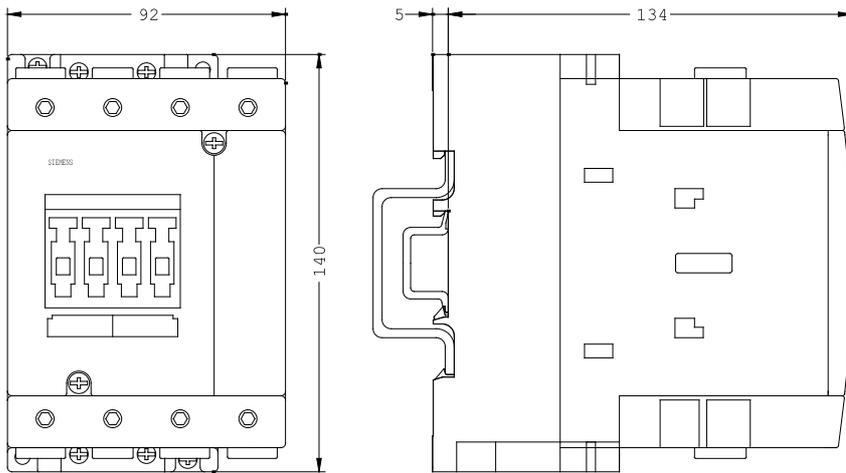
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RT1346-1AH20/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RT1346-1AH20](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1346-1AH20)



last change:

Aug 4, 2014