



CONTACTOR, AC-1 140 A/400 V, DC 220 V,  
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                                         |    |             |
| • of the contactor / typical                                                          |    | 10,000,000  |
| • of the contactor with added auxiliary switch block / typical                        |    | 10,000,000  |
| • 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                            |   |     |
| • at AC-1 / at 400 V                         |   |     |
| • at 40 °C ambient temperature / rated value | A | 140 |
| • at AC-3 / at 400 V / rated value           | A | 44  |
| • 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  |
| <b>Service power</b>                                 |    |      |
| • 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                                         |   | DC          |
| Operating range factor control supply voltage rated value / of the magnet coil |   |             |
| • for DC                                                                       |   | 0.8 ... 1.1 |
| Pull-in power / of the solenoid / for DC                                       | W | 15          |
| Holding power / of the solenoid / for DC                                       | W | 15          |

| 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                |  |                   |
| • 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:

|                                                               |    |                                                                        |
|---------------------------------------------------------------|----|------------------------------------------------------------------------|
| <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 | 70                                                                     |
| <b>Height</b>                                                 | mm | 146                                                                    |
| <b>Depth</b>                                                  | mm | 152                                                                    |
| <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> <li>• for auxiliary and control current circuit</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  | screw-type terminals<br>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> <li>• stranded</li> <li>• finely stranded                                     <ul style="list-style-type: none"> <li>• with conductor end processing</li> <li>• without conductor final cutting</li> </ul> </li> </ul> </li> <li>• for AWG conductors / for main contacts</li> <li>• for auxiliary contacts                             <ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded                                     <ul style="list-style-type: none"> <li>• with conductor end processing</li> </ul> </li> </ul> </li> <li>• for AWG conductors / for auxiliary contacts</li> </ul> |  | 2x (2.5 ... 16 mm <sup>2</sup> )<br>2x (10 ... 50 mm <sup>2</sup> )<br><br>2x (2.5 ... 35 mm <sup>2</sup> )<br>2x (10 ... 35 mm <sup>2</sup> )<br>2x (10 ... 1/0)<br><br>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> )<br><br>2x (0.5 ... 1.5 mm <sup>2</sup> ), 2x (0.75 ... 2.5 mm <sup>2</sup> )<br>2x (20 ... 16), 2x (18 ... 14), 1x 12 |

## Certificates/approvals:

### General Product Approval



CCC



CSA



UL

### Functional Safety / Safety of Machinery

[Type Examination](#)



EG-Konf.

### Test Certificates

[Special Test Certificate](#)

### Shipping Approval



ABS



GL



LRS



RINA



RMRS

### other

[Confirmation](#)

[other](#)

[Environmental Confirmations](#)

#### 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:

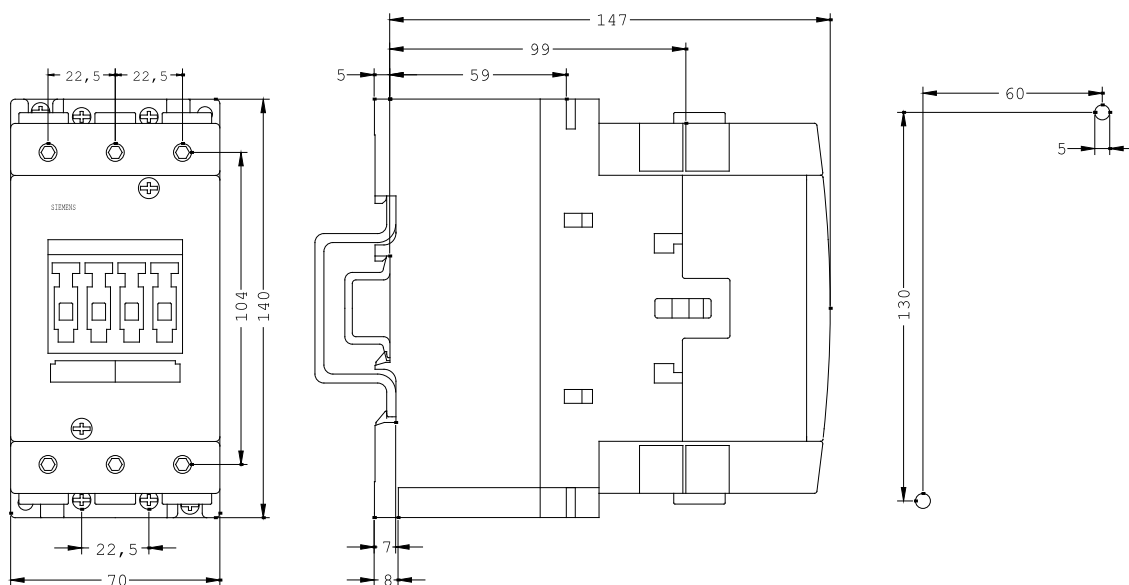
<http://www.siemens.com/cax>

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

<http://support.automation.siemens.com/WW/view/en/3RT1446-1BM40/all>

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

[http://www.automation.siemens.com/bilddb/cax\\_en.aspx?mlfb=3RT1446-1BM40](http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RT1446-1BM40)





last change:

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