

CONTACTOR, 90KW/400V/AC-3, AC(40...60HZ)/DC OPERATION  
UC 23...26V AUXIL. CONTACTS 2NO+2NC 3-POLE, SIZE S6 BAR  
CONNECTIONS CONVENT. OPERATING MECHANISM MULTI-  
UNIT PACKAGING 1 PACK = 9 UNITS



Figure similar

|                                                     |                           |
|-----------------------------------------------------|---------------------------|
| product brandname                                   | SIRIUS                    |
| Product designation                                 | power contactor           |
| General technical data                              |                           |
| Size of contactor                                   | S6                        |
| Insulation voltage                                  |                           |
| • rated value                                       | 1 000 V                   |
| Degree of pollution                                 | 3                         |
| Surge voltage resistance rated value                | 8 kV                      |
| maximum permissible voltage for safe isolation      |                           |
| • between coil and main contacts acc. to EN 60947-1 | 690 V                     |
| Protection class IP                                 |                           |
| • on the front                                      | IP00                      |
| • of the terminal                                   | IP00                      |
| Shock resistance                                    |                           |
| • at rectangular impulse                            |                           |
| — at AC                                             | 8,5g / 5 ms, 4,2g / 10 ms |

|                                                                                     |                            |
|-------------------------------------------------------------------------------------|----------------------------|
| — at DC                                                                             | 8,5g / 5 ms, 4,2g / 10 ms  |
| • with sine pulse                                                                   |                            |
| — at AC                                                                             | 13,4g / 5 ms, 6,5g / 10 ms |
| — at DC                                                                             | 13,4g / 5 ms, 6,5g / 10 ms |
| <b>Mechanical service life (switching cycles)</b>                                   |                            |
| • of 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                 |
| <b>Ambient conditions</b>                                                           |                            |
| <b>Installation altitude at height above sea level maximum</b>                      | 2 000 m                    |
| <b>Ambient temperature</b>                                                          |                            |
| • during operation                                                                  | -25 ... +60 °C             |
| • during storage                                                                    | -55 ... +80 °C             |
| <b>Main circuit</b>                                                                 |                            |
| <b>Number of poles for main current circuit</b>                                     | 3                          |
| <b>Number of NO contacts for main contacts</b>                                      | 3                          |
| <b>Number of NC contacts for main contacts</b>                                      | 0                          |
| <b>Operating current</b>                                                            |                            |
| • at AC-1 at 400 V                                                                  |                            |
| — at ambient temperature 40 °C rated value                                          | 215 A                      |
| • at AC-1                                                                           |                            |
| — up to 690 V at ambient temperature 40 °C rated value                              | 215 A                      |
| — up to 690 V at ambient temperature 60 °C rated value                              | 185 A                      |
| — up to 1000 V at ambient temperature 40 °C rated value                             | 100 A                      |
| — up to 1000 V at ambient temperature 60 °C rated value                             | 100 A                      |
| • at AC-3                                                                           |                            |
| — at 400 V rated value                                                              | 185 A                      |
| — at 690 V rated value                                                              | 170 A                      |
| — at 1000 V rated value                                                             | 65 A                       |
| <b>Connectable conductor cross-section in main circuit at AC-1</b>                  |                            |
| • at 60 °C minimum permissible                                                      | 95 mm²                     |
| • at 40 °C minimum permissible                                                      | 95 mm²                     |
| <b>Operating current for approx. 200000 operating cycles at AC-4</b>                |                            |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• at 400 V rated value</li> <li>• at 690 V rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 81 A<br>65 A                                                                                              |
| <b>Operating current</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                           |
| <ul style="list-style-type: none"> <li>• at 1 current path at DC-1 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> </ul> </li> <li>• with 2 current paths in series at DC-1 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> </ul> </li> <li>• with 3 current paths in series at DC-1 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> </ul> </li> </ul>                                                            | 160 A<br>18 A<br><br>160 A<br>160 A<br><br>160 A<br>160 A                                                 |
| <b>Operating current</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                           |
| <ul style="list-style-type: none"> <li>• at 1 current path at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 24 V rated value</li> <li>— at 110 V rated value</li> </ul> </li> <li>• with 2 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 110 V rated value</li> <li>— at 24 V rated value</li> </ul> </li> <li>• with 3 current paths in series at DC-3 at DC-5 <ul style="list-style-type: none"> <li>— at 110 V rated value</li> <li>— at 24 V rated value</li> </ul> </li> </ul>                                    | 160 A<br>2.5 A<br><br>160 A<br>160 A<br><br>160 A<br>160 A                                                |
| <b>Operating power</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                           |
| <ul style="list-style-type: none"> <li>• at AC-1 <ul style="list-style-type: none"> <li>— at 230 V at 60 °C rated value</li> <li>— at 400 V rated value</li> <li>— at 690 V rated value</li> <li>— at 690 V at 60 °C rated value</li> <li>— at 1000 V at 60 °C rated value</li> </ul> </li> <li>• at AC-2 at 400 V rated value</li> <li>• at AC-3 <ul style="list-style-type: none"> <li>— at 230 V rated value</li> <li>— at 400 V rated value</li> <li>— at 500 V rated value</li> <li>— at 690 V rated value</li> <li>— at 1000 V rated value</li> </ul> </li> </ul> | 70 kW<br>121 kW<br>210 kW<br>210 kW<br>165 W<br>104 kW<br><br>61 kW<br>104 kW<br>132 kW<br>167 kW<br>90 W |
| <b>Operating power for approx. 200000 operating cycles at AC-4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                           |
| <ul style="list-style-type: none"> <li>• at 400 V rated value</li> <li>• at 690 V rated value</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 45 kW<br>65 kW                                                                                            |
| <b>Thermal short-time current limited to 10 s</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1 480 A                                                                                                   |

|                                                                                        |           |
|----------------------------------------------------------------------------------------|-----------|
| Power loss [W] at AC-3 at 400 V for rated value of the operating current per conductor | 13 W      |
| No-load switching frequency                                                            |           |
| • at AC                                                                                | 2 000 1/h |
| • at DC                                                                                | 2 000 1/h |
| Operating frequency                                                                    |           |
| • at AC-1 maximum                                                                      | 800 1/h   |
| • at AC-2 maximum                                                                      | 300 1/h   |
| • at AC-3 maximum                                                                      | 750 1/h   |
| • at AC-4 maximum                                                                      | 130 1/h   |

#### Control circuit/ Control

|                                                                                |               |
|--------------------------------------------------------------------------------|---------------|
| Type of voltage of the control supply voltage                                  | AC/DC         |
| Control supply voltage at AC                                                   |               |
| • at 50 Hz rated value                                                         | 23 ... 26 V   |
| • at 60 Hz rated value                                                         | 23 ... 26 V   |
| Control supply voltage at DC                                                   |               |
| • rated value                                                                  | 23 ... 26 V   |
| Control supply voltage frequency 1 rated value                                 | 50 Hz         |
| Control supply voltage frequency 2 rated value                                 | 60 Hz         |
| Operating range factor control supply voltage rated value of magnet coil at AC |               |
| • at 50 Hz                                                                     | 0.8 ... 1.1   |
| • at 60 Hz                                                                     | 0.8 ... 1.1   |
| Operating range factor control supply voltage rated value of magnet coil at DC | 0.8 ... 1.1   |
| Design of the surge suppressor                                                 | with varistor |
| Apparent pick-up power of magnet coil at AC                                    | 300 V·A       |
| Inductive power factor with closing power of the coil                          | 0.9           |
| Apparent holding power of magnet coil at AC                                    | 5.8 V·A       |
| Inductive power factor with the holding power of the coil                      | 0.8           |
| Closing power of magnet coil at DC                                             | 360 W         |
| Holding power of magnet coil at DC                                             | 5.2 W         |
| Closing delay                                                                  |               |
| • at AC                                                                        | 20 ... 95 ms  |
| • at DC                                                                        | 20 ... 95 ms  |
| Opening delay                                                                  |               |
| • at AC                                                                        | 40 ... 60 ms  |
| • at DC                                                                        | 40 ... 60 ms  |
| Arcing time                                                                    | 10 ... 15 ms  |

#### Auxiliary circuit

|                       |  |
|-----------------------|--|
| Number of NC contacts |  |
|-----------------------|--|

|                                                                                                                                                       |       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| <ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>— instantaneous contact</li> </ul> </li> </ul> | 2     |
| <b>Number of NO contacts</b>                                                                                                                          |       |
| <ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>— instantaneous contact</li> </ul> </li> </ul> | 2     |
| Operating current at AC-12 maximum                                                                                                                    | 10 A  |
| <b>Operating current at AC-15</b>                                                                                                                     |       |
| <ul style="list-style-type: none"> <li>• at 230 V rated value</li> </ul>                                                                              | 6 A   |
| <ul style="list-style-type: none"> <li>• at 400 V rated value</li> </ul>                                                                              | 3 A   |
| <b>Operating current at DC-12</b>                                                                                                                     |       |
| <ul style="list-style-type: none"> <li>• at 60 V rated value</li> </ul>                                                                               | 6 A   |
| <ul style="list-style-type: none"> <li>• at 110 V rated value</li> </ul>                                                                              | 3 A   |
| <ul style="list-style-type: none"> <li>• at 220 V rated value</li> </ul>                                                                              | 1 A   |
| <b>Operating current at DC-13</b>                                                                                                                     |       |
| <ul style="list-style-type: none"> <li>• at 24 V rated value</li> </ul>                                                                               | 10 A  |
| <ul style="list-style-type: none"> <li>• at 60 V rated value</li> </ul>                                                                               | 2 A   |
| <ul style="list-style-type: none"> <li>• at 110 V rated value</li> </ul>                                                                              | 1 A   |
| <ul style="list-style-type: none"> <li>• at 220 V rated value</li> </ul>                                                                              | 0.3 A |

#### UL/CSA ratings

|                                                             |             |
|-------------------------------------------------------------|-------------|
| <b>Contact rating of auxiliary contacts according to UL</b> | A600 / Q600 |
|-------------------------------------------------------------|-------------|

#### Short-circuit protection

|                                                                                                                                                                                                                                              |                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| <b>Design of the fuse link</b>                                                                                                                                                                                                               |                                        |
| <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 coordination 1 required</li> <li>— with type of assignment 2 required</li> </ul> </li> </ul> | fuse gL/gG: 355 A<br>fuse gL/gG: 315 A |
| <ul style="list-style-type: none"> <li>• for short-circuit protection of the auxiliary switch required</li> </ul>                                                                                                                            | fuse gL/gG: 10 A                       |

#### Installation/ mounting/ dimensions

|                                                                                                                                         |              |
|-----------------------------------------------------------------------------------------------------------------------------------------|--------------|
| <b>Mounting type</b>                                                                                                                    | screw fixing |
| <ul style="list-style-type: none"> <li>• Side-by-side mounting</li> </ul>                                                               | Yes          |
| <b>Height</b>                                                                                                                           | 172 mm       |
| <b>Width</b>                                                                                                                            | 120 mm       |
| <b>Depth</b>                                                                                                                            | 170 mm       |
| <b>Required spacing</b>                                                                                                                 |              |
| <ul style="list-style-type: none"> <li>• for grounded parts <ul style="list-style-type: none"> <li>— at the side</li> </ul> </li> </ul> | 10 mm        |

#### Connections/Terminals

|                                                                                               |                      |
|-----------------------------------------------------------------------------------------------|----------------------|
| <b>Type of 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 connectable conductor cross-sections</b>                                           |                      |

|                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• at AWG conductors for main contacts</li> </ul>                                                                                                                                                                                                           | 4 ... 250 kcmil                                                                                                                                                                                                                |
| <b>Type of connectable conductor cross-sections</b> <ul style="list-style-type: none"> <li>• for auxiliary contacts <ul style="list-style-type: none"> <li>— solid</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• at AWG conductors for auxiliary contacts</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> )<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                                                          |                                                                                   |                                                                                   | Declaration of Conformity                                                         | Test Certificates                             |                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------|-------------------------|
|  |  |  |  | <a href="#">spezielle Prüfbescheinigungen</a> | <a href="#">sonstig</a> |
| CSA                                                                               | UL                                                                                |                                                                                   | EG-Konf.                                                                          | <a href="#">n</a>                             |                         |

| Shipping Approval                                                                 |                                                                                   |                                                                                   |                                                                                   | other                             |                         |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------|-------------------------|
|  |  |  |  | <a href="#">Umweltbestätigung</a> | <a href="#">sonstig</a> |
| ABS                                                                               | DNV                                                                               | GL                                                                                | RMRS                                                                              |                                   |                         |

| other                         |
|-------------------------------|
| <a href="#">Bestätigungen</a> |

#### Further information

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

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

##### Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1056-6AB36-Z X95>

##### Cax online generator

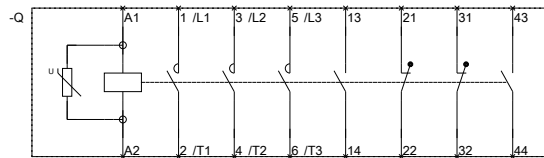
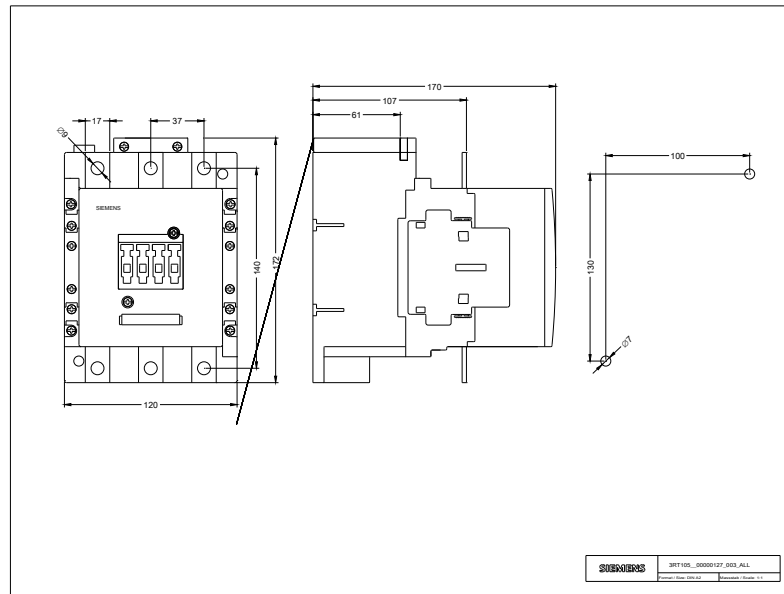
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RT1056-6AB36-Z X95>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RT1056-6AB36-Z X95>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RT1056-6AB36-Z X95&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RT1056-6AB36-Z X95&lang=en)



3RT106 - A. 6. 01. 4. IEC.DXF  
3RT107 - A. 6. 01. 4. IEC.DXF

last modified:

10/19/2016