

SIRIUS, COMPACT STARTER, REVERSING STARTER . 690 V, 24 V DC, 1 ... 4 A, IP20, CONN. MAIN CIRCUIT: PLUG-IN, W/O TERMINALS, CONN. CONTROL CIRCUIT: SPRING-LOADED TERMINAL



|                       |                  |
|-----------------------|------------------|
| Product brand name    | SIRIUS           |
| Product designation   | compact starter  |
| Design of the product | reversing feeder |

| General technical data                         |                                                                     |
|------------------------------------------------|---------------------------------------------------------------------|
| Product function                               |                                                                     |
| • Control circuit interface to parallel wiring | No                                                                  |
| Product extension                              |                                                                     |
| • Auxiliary switch                             | Yes                                                                 |
| Insulation voltage                             |                                                                     |
| • rated value                                  | 690 V                                                               |
| Degree of pollution                            | 3                                                                   |
| Surge voltage resistance rated value           | 6 000 V                                                             |
| Protection class IP                            | IP20                                                                |
| Vibration resistance                           | f= 4 ... 5.8 Hz, d= 15 mm; f= 5.8 ... 500 Hz, a= 20 m/s²; 10 cycles |
| Mechanical service life (switching cycles)     |                                                                     |
| • of the main contacts typical                 | 10 000 000                                                          |
| • of auxiliary contacts typical                | 10 000 000                                                          |
| • of the signaling contacts typical            | 10 000 000                                                          |

|                                                                      |                                                 |
|----------------------------------------------------------------------|-------------------------------------------------|
| <b>Electrical endurance (switching cycles) of auxiliary contacts</b> |                                                 |
| • at DC-13 at 6 A at 24 V typical                                    | 30 000                                          |
| • at AC-15 at 6 A at 230 V typical                                   | 200 000                                         |
| <b>Type of assignment</b>                                            | continuous operation according to IEC 60947-6-2 |
| <b>Equipment marking</b>                                             |                                                 |
| • acc. to DIN EN 61346-2                                             | Q                                               |
| • acc. to DIN EN 81346-2                                             | Q                                               |

|                            |                |
|----------------------------|----------------|
| <b>Ambient conditions</b>  |                |
| <b>Ambient temperature</b> |                |
| • during operation         | -20 ... +60 °C |
| • during storage           | -55 ... +80 °C |
| • during transport         | -55 ... +80 °C |

|                                                                                   |                     |
|-----------------------------------------------------------------------------------|---------------------|
| <b>Main circuit</b>                                                               |                     |
| <b>Number of poles for main current circuit</b>                                   | 3                   |
| <b>Adjustable pick-up value current of the current-dependent overload release</b> | 1 ... 4 A           |
| <b>Formula for making capacity limit current</b>                                  | 12 x I <sub>e</sub> |
| <b>Formula for interruption capacity limit current</b>                            | 10 x I <sub>e</sub> |
| <b>Mechanical power output for 4-pole AC motor</b>                                |                     |
| • at 400 V rated value                                                            | 1.5 kW              |
| • at 500 V rated value                                                            | 2.2 kW              |
| • at 690 V rated value                                                            | 3 kW                |
| <b>Operating voltage</b>                                                          |                     |
| • at AC-3 rated value maximum                                                     | 690 V               |
| <b>Operating current</b>                                                          |                     |
| • at AC at 400 V rated value                                                      | 4 A                 |
| • at AC-43                                                                        |                     |
| — at 400 V rated value                                                            | 3.6 A               |
| — at 500 V rated value                                                            | 3.9 A               |
| — at 690 V rated value                                                            | 3.8 A               |
| <b>No-load switching frequency</b>                                                | 3 600 1/h           |
| <b>Operating frequency</b>                                                        |                     |
| • at AC-41 acc. to IEC 60947-6-2 maximum                                          | 750 1/h             |
| • at AC-43 acc. to IEC 60947-6-2 maximum                                          | 250 1/h             |

|                                 |       |
|---------------------------------|-------|
| <b>Control circuit/ Control</b> |       |
| <b>Type of voltage</b>          | DC    |
| <b>Holding power</b>            |       |
| • at DC maximum                 | 2.9 W |

|                              |  |
|------------------------------|--|
| <b>Auxiliary circuit</b>     |  |
| <b>Number of NC contacts</b> |  |

|                                                                   |        |
|-------------------------------------------------------------------|--------|
| • for auxiliary contacts                                          | 0      |
| <b>Number of NO contacts</b>                                      |        |
| • for auxiliary contacts                                          | 0      |
| • of instantaneous short-circuit trip unit for signaling contact  | 0      |
| <b>Number of CO contacts</b>                                      |        |
| • of the current-dependent overload release for signaling contact | 0      |
| <b>Operating current of auxiliary contacts at AC-12 maximum</b>   | 10 A   |
| <b>Operating current of auxiliary contacts at DC-13</b>           |        |
| • at 250 V                                                        | 0.27 A |

|                                                                  |                            |
|------------------------------------------------------------------|----------------------------|
| <b>Protective and monitoring functions</b>                       |                            |
| <b>Trip class</b>                                                | CLASS 10 and 20 adjustable |
| <b>Off-delay time</b>                                            | 50 ms                      |
| <b>Operational short-circuit current breaking capacity (Ics)</b> |                            |
| • at 400 V                                                       | 53 kA                      |
| • at 500 V rated value                                           | 3 kA                       |
| • at 690 V rated value                                           | 3 kA                       |

|                                                         |         |
|---------------------------------------------------------|---------|
| <b>UL/CSA ratings</b>                                   |         |
| <b>Full-load current (FLA) for three-phase AC motor</b> |         |
| • at 480 V rated value                                  | 4 A     |
| • at 600 V rated value                                  | 4 A     |
| <b>Yielded mechanical performance [hp]</b>              |         |
| • for three-phase AC motor                              |         |
| — at 200/208 V rated value                              | 0.75 hp |
| — at 220/230 V rated value                              | 0.75 hp |
| — at 460/480 V rated value                              | 2 hp    |
| — at 575/600 V rated value                              | 3 hp    |

|                                                                 |                  |
|-----------------------------------------------------------------|------------------|
| <b>Short-circuit protection</b>                                 |                  |
| <b>Product function Short circuit protection</b>                | Yes              |
| <b>Design of the fuse link</b>                                  |                  |
| • for short-circuit protection of the auxiliary switch required | fuse gL/gG: 10 A |

|                                           |                                                |
|-------------------------------------------|------------------------------------------------|
| <b>Installation/ mounting/ dimensions</b> |                                                |
| <b>Mounting position</b>                  | any                                            |
| • recommended                             | vertical, on horizontal standard mounting rail |
| <b>Mounting type</b>                      | screw and snap-on mounting                     |
| <b>Height</b>                             | 191 mm                                         |
| <b>Width</b>                              | 90 mm                                          |

|                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Depth                                                                                                                                                                                                                                                                                                                                                        | 165 mm                                                                                                                                               |
| <b>Connections/Terminals</b>                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                      |
| <b>Product function</b> <ul style="list-style-type: none"> <li>removable terminal for main circuit</li> <li>removable terminal for auxiliary and control circuit</li> </ul>                                                                                                                                                                                  | Yes<br>Yes                                                                                                                                           |
| <b>Type of electrical connection</b> <ul style="list-style-type: none"> <li>for main current circuit</li> <li>for auxiliary and control current circuit</li> </ul>                                                                                                                                                                                           | plug-in without terminals<br>spring-loaded terminals                                                                                                 |
| <b>Type of connectable conductor cross-sections</b> <ul style="list-style-type: none"> <li>for main contacts               <ul style="list-style-type: none"> <li>solid</li> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> </ul> </li> <li>at AWG conductors for main contacts</li> </ul>           | 2x (1.5 ... 6 mm <sup>2</sup> ), 1x 10 mm <sup>2</sup><br>2x (1.5 ... 6 mm <sup>2</sup> )<br>2x (1.5 ... 6 mm <sup>2</sup> )<br>2x (16 ... 10), 1x 8 |
| <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> <li>finely stranded without core end processing</li> </ul> </li> <li>at AWG conductors for auxiliary contacts</li> </ul> | 2x (0.25 ... 1.5 mm <sup>2</sup> )<br>2x (0.25 ... 1.5 mm <sup>2</sup> )<br>2x (0.25 ... 1.5 mm <sup>2</sup> )<br>2x (24 ... 16)                     |
| <b>Safety related data</b>                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                      |
| <b>B10 value</b> <ul style="list-style-type: none"> <li>with high demand rate acc. to SN 31920</li> </ul>                                                                                                                                                                                                                                                    | 1 500 000                                                                                                                                            |
| <b>Proportion of dangerous failures</b> <ul style="list-style-type: none"> <li>with high demand rate acc. to SN 31920</li> </ul>                                                                                                                                                                                                                             | 50 %                                                                                                                                                 |
| <b>Communication/ Protocol</b>                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                      |
| <b>Product function Bus communication</b>                                                                                                                                                                                                                                                                                                                    | Yes                                                                                                                                                  |
| <b>Protocol is supported</b> <ul style="list-style-type: none"> <li>IO-Link protocol</li> </ul>                                                                                                                                                                                                                                                              | Yes                                                                                                                                                  |
| <b>IO-Link transfer rate</b>                                                                                                                                                                                                                                                                                                                                 | COM2 (38,4 kBaud)                                                                                                                                    |
| <b>Point-to-point cycle time between master and IO-Link device minimum</b>                                                                                                                                                                                                                                                                                   | 2.5 ms                                                                                                                                               |
| <b>Type of voltage supply via input/output link master</b>                                                                                                                                                                                                                                                                                                   | No                                                                                                                                                   |
| <b>Amount of data</b> <ul style="list-style-type: none"> <li>of the address area of the inputs with cyclical transfer total</li> <li>of the address area of the outputs with cyclical transfer total</li> </ul>                                                                                                                                              | 2 byte<br>2 byte                                                                                                                                     |

## Electromagnetic compatibility

|                                                      |                            |
|------------------------------------------------------|----------------------------|
| Field-bound parasitic coupling acc. to IEC 61000-4-3 | 80 ... 3000 MHz at 10V/m   |
| Electrostatic discharge acc. to IEC 61000-4-2        | 8 kV                       |
| Conducted HF-interference emissions acc. to CISPR11  | 150 kHz ... 30 MHz Class A |
| Field-bound HF-interference emission acc. to CISPR11 | 30 ... 1000 MHz Class A    |

## Supply voltage

|                                           |     |
|-------------------------------------------|-----|
| Supply voltage required Auxiliary voltage | Yes |
|-------------------------------------------|-----|

## Display

|                                                                                                     |                    |
|-----------------------------------------------------------------------------------------------------|--------------------|
| Display version                                                                                     | green/red dual LED |
| <ul style="list-style-type: none"> <li>as status display of the input/output link device</li> </ul> |                    |

## Certificates/approvals

| General Product Approval                                                                 | EMC                                                                                           | Functional Safety/Safety of Machinery                                                      |
|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| <br>CCC | <br>EAC      | <br>VDE |
| <br>UL  | <br>C-Tick |                                                                                            |
| <br>CSA |                                                                                               |                                                                                            |

| Declaration of Conformity                                                                       | Test Certificates                                  | Marine / Shipping                                                                                     |
|-------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| <br>EG-Konf. | <a href="#">Type Test Certificates/Test Report</a> | <br>BUREAU VERITAS |
|                                                                                                 |                                                    | <br>LRS            |
|                                                                                                 |                                                    | <br>PRS          |
|                                                                                                 |                                                    | <br>RINA         |

| Marine / Shipping                                                                           | other                                       |
|---------------------------------------------------------------------------------------------|---------------------------------------------|
| <br>RMRS | <a href="#">Environmental Confirmations</a> |
|                                                                                             | <a href="#">Confirmation</a>                |

## Further information

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

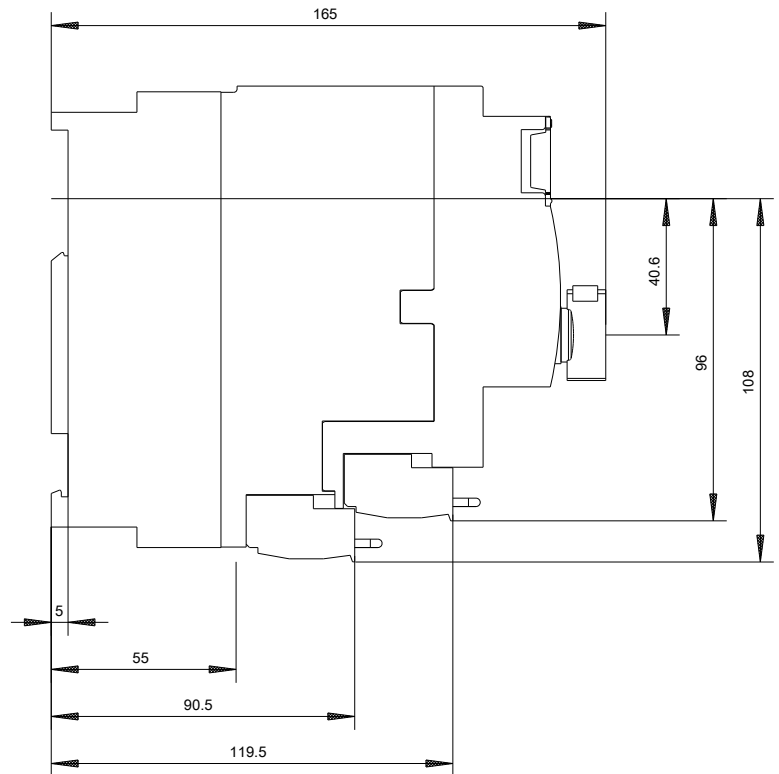
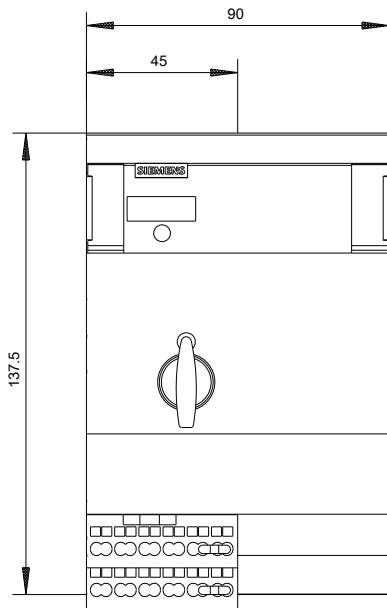
<http://www.siemens.com/industrial-controls/catalogs>

### Industry Mall (Online ordering system)

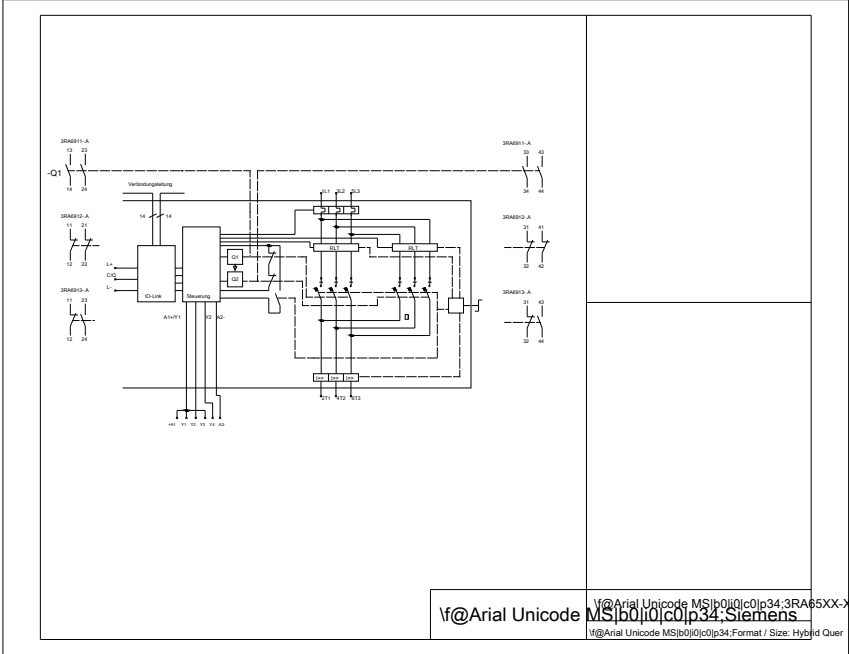
<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA6500-2CB43>

### Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA6500-2CB43>







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