



SIRIUS, COMPACT STARTER, REVERSING STARTER 690 V, 110 ... 240 V AC/DC, 50 ... 60 HZ, 0.1 ... 0.4 A, IP20, MAIN CIRCUIT CONNECTION: SCREW TERMINAL, AUXILIARY CIRCUIT CONNECTION: SCREW TERMINAL

Figure similar

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

General technical data:

|  |  |
|--|--|
| <b>Product function</b>  |  |
| <ul style="list-style-type: none"> <li>Control circuit interface to parallel wiring</li> </ul>   | Yes  |
| <b>Product expansion</b>   |  |
| <ul style="list-style-type: none"> <li>Auxiliary switch</li> </ul>   | Yes  |
| <b>Insulation voltage</b>  |  |
| <ul style="list-style-type: none"> <li>Rated value</li> </ul>  | 690 V  |
| <b>Surge voltage resistance Rated value</b>  | 6 000 V  |
| <b>maximum permissible voltage for safe isolation</b>  |  |
| <ul style="list-style-type: none"> <li>between auxiliary and auxiliary circuit</li> <li>between control and auxiliary circuit</li> <li>between main and auxiliary circuit</li> </ul> | 250 V<br>300 V<br>400 V  |
| <b>Protection class IP</b>   | IP20   |
| <b>Degree of pollution</b>   | 3  |
| <b>Vibration resistance</b>  | f= 4 ... 5.8 Hz, d= 15 mm; f= 5.8 ... 500 Hz, a= 20 m/s <sup>2</sup> ; 10 cycles |
| <b>Mechanical service life (switching cycles)</b>  |  |
| <ul style="list-style-type: none"> <li>of the main contacts typical</li> <li>of the auxiliary contacts typical</li> <li>of the signaling contacts typical</li> </ul>                 | 10 000 000<br>10 000 000<br>10 000 000   |
| <b>Electrical endurance (switching cycles) of the auxiliary contacts</b>   |  |
| <ul style="list-style-type: none"> <li>at DC-13 at 6 A at 24 V typical</li> </ul>  | 100 000  |

|  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• at AC-15 at 6 A at 230 V typical</li> </ul> | 500 000   |
| <b>Electrical endurance (switching cycles) of the signaling contacts</b>             |   |
| <ul style="list-style-type: none"> <li>• at DC-13 at 6 A at 24 V typical</li> </ul>  | 100 000   |
| <ul style="list-style-type: none"> <li>• at AC-15 at 6 A at 230 V typical</li> </ul> | 500 000   |
| <b>Type of assignment</b>  | continuous operation according to IEC 60947-6-2 |
| <b>Equipment marking</b>   |   |
| <ul style="list-style-type: none"> <li>• acc. to DIN EN 61346-2</li> </ul>           | Q   |

#### Ambient conditions:

|  |                |
|--|----------------|
| <b>Installation altitude at height above sea level maximum</b>       | 2 000 m        |
| <b>Ambient temperature</b>   |                |
| <ul style="list-style-type: none"> <li>• during operation</li> </ul> | -20 ... +60 °C |
| <ul style="list-style-type: none"> <li>• during storage</li> </ul>   | -55 ... +80 °C |
| <ul style="list-style-type: none"> <li>• during transport</li> </ul> | -55 ... +80 °C |
| <b>Relative humidity during operation</b>                            | 10 ... 90 %    |

#### Main circuit:

|  |                      |
|--|----------------------|
| <b>Number of poles for main current circuit</b>  | 3                    |
| <b>Adjustable response value current of the current-dependent overload release</b>         | 0.1 ... 0.4 A        |
| <b>Formula for making capacity limit current</b>   | 120 x I <sub>e</sub> |
| <b>Formula for interruption capacity limit current</b>                                     | 100 x I <sub>e</sub> |
| <b>Mechanical power output for 4-pole AC motor</b>   |                      |
| <ul style="list-style-type: none"> <li>• at 400 V Rated value</li> </ul>                   | 0.09 kW              |
| <ul style="list-style-type: none"> <li>• at 500 V Rated value</li> </ul>                   | 0.12 kW              |
| <ul style="list-style-type: none"> <li>• at 690 V Rated value</li> </ul>                   | 0.18 kW              |
| <b>Operating voltage</b>   |                      |
| <ul style="list-style-type: none"> <li>• at AC-3 Rated value maximum</li> </ul>            | 690 V                |
| <b>Operating current</b>   |                      |
| <ul style="list-style-type: none"> <li>• at AC at 400 V Rated value</li> </ul>             | 0.4 A                |
| <ul style="list-style-type: none"> <li>• at AC-43</li> </ul>                               |                      |
| <ul style="list-style-type: none"> <li>— at 400 V Rated value</li> </ul>                   | 0.3 A                |
| <ul style="list-style-type: none"> <li>— at 500 V Rated value</li> </ul>                   | 0.32 A               |
| <ul style="list-style-type: none"> <li>— at 690 V Rated value</li> </ul>                   | 0.35 A               |
| <b>No-load switching frequency</b>   | 3 600 1/h            |
| <b>Operating frequency</b>   |                      |
| <ul style="list-style-type: none"> <li>• at AC-41 acc. to IEC 60947-6-2 maximum</li> </ul> | 750 1/h              |
| <ul style="list-style-type: none"> <li>• at AC-43 acc. to IEC 60947-6-2 maximum</li> </ul> | 250 1/h              |

#### Control circuit/ Control:

|                                       |    |
|---------------------------------------|----|
| <b>Type of voltage</b>                | AC |
| <b>Control supply voltage 1 at AC</b> |    |

|   |                                |
|---|--------------------------------|
| <ul style="list-style-type: none"> <li>• at 50 Hz</li> <li>• at 60 Hz</li> </ul>              | 110 ... 240 V<br>110 ... 240 V |
| <b>Control supply voltage 1</b>   |                                |
| <ul style="list-style-type: none"> <li>• at DC</li> <li>• Rated value</li> </ul>              | 110 ... 240 V<br>50 Hz         |
| <b>Control supply voltage frequency 2 Rated value</b>   | 60 Hz                          |
| <b>Holding power</b>  |                                |
| <ul style="list-style-type: none"> <li>• with AC maximum</li> <li>• for DC maximum</li> </ul> | 6 W<br>5.1 W                   |

#### Auxiliary circuit:

|  |        |
|--|--------|
| <b>Number of NC contacts</b>   |        |
| <ul style="list-style-type: none"> <li>• for auxiliary contacts</li> </ul>   | 0      |
| <b>Number of NO contacts</b>   |        |
| <ul style="list-style-type: none"> <li>• for auxiliary contacts</li> <li>• of the instantaneous short-circuit release for signaling contact</li> </ul> | 2<br>1 |
| <b>Number of CO contacts</b>   |        |
| <ul style="list-style-type: none"> <li>• of the current-dependent overload release for signaling contact</li> </ul>                                    | 1      |
| <b>Operating current of the auxiliary contacts at AC-12 maximum</b>  | 10 A   |
| <b>Operating current of the auxiliary contacts at DC-13</b>  |        |
| <ul style="list-style-type: none"> <li>• at 250 V</li> </ul>   | 0.27 A |

#### Protective and monitoring functions:

|  |                            |
|--|----------------------------|
| <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>   |                            |
| <ul style="list-style-type: none"> <li>• at 400 V</li> <li>• at 500 V Rated value</li> <li>• at 690 V Rated value</li> </ul> | 53 kA<br>3 kA<br>3 kA      |

#### UL/CSA ratings:

|  |   |
|--|---|
| <b>Full-load current (FLA) for three-phase AC motor</b>  |   |
| <ul style="list-style-type: none"> <li>• at 480 V Rated value</li> <li>• at 600 V Rated value</li> </ul> | 0.4 A<br>0.4 A  |
| <b>Contact rating of the auxiliary contacts acc. to UL</b>   | contacts 21-22, 13-14, 43-44 Q600 / A600, contacts 77-78 R300 / B300, contacts 95-96-98 R300 / D300 |

#### 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 |

- for short-circuit protection of the signaling switch of the short-circuit release required
- for short-circuit protection of the signaling switch of the overload release required

6A gL/gG/400V

4A gL/gG/400V

**Installation/ mounting/ dimensions:**

|   |  |
|---|--|
| <b>mounting position</b>  | any  |
| <ul style="list-style-type: none"> <li>• recommended</li> </ul> | vertical, on horizontal standard mounting rail |
| <b>Mounting type</b>  | screw and snap-on mounting                     |
| <b>Height</b>   | 170 mm   |
| <b>Width</b>  | 90 mm  |
| <b>Depth</b>  | 165 mm   |

**Connections/ Terminals:**

|  |  |
|--|--|
| <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>  | screw-type terminals<br>screw-type terminals   |
| <b>Type of 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>— finely stranded with core end processing</li> </ul> </li> <li>• for 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 (16 ... 10), 1x 8                                  |
| <b>Type of connectable conductor cross-section</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>• for AWG conductors for auxiliary contacts</li> </ul> | 0.5 ... 4 mm <sup>2</sup> , 2x (0.5 ... 2.5 mm <sup>2</sup> )<br>0.5 ... 2.5 mm <sup>2</sup> , 2x (0.5 ... 1.5 mm <sup>2</sup> )<br>2x (20 ... 14) |

**Safety related data:**

|   |              |
|---|--------------|
| <b>B10 value with high demand rate acc. to SN 31920</b>   | 3 000 000    |
| <b>Proportion of dangerous failures</b>   |              |
| <ul style="list-style-type: none"> <li>• with low demand rate acc. to SN 31920</li> <li>• with high demand rate acc. to SN 31920</li> </ul> | 40 %<br>50 % |
| <b>T1 value for proof test interval or service life acc. to IEC 61508</b>   | 20 y         |

**Communication/ Protocol:**

|   |    |
|---|----|
| <b>Product function Bus communication</b> | No |
|---|----|

**Electromagnetic compatibility:**

|  |   |
|--|---|
| <b>Conducted interference due to burst acc. to IEC 61000-4-4</b> | 4 kV main contacts, 2 kV auxiliary contacts |
|--|---|

|   |   |
|---|---|
| Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5     | 4 kV main contacts, 2 kV auxiliary contacts |
| Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5 | 2 kV main contacts, 1 kV auxiliary contacts |
| Conducted interference due to high-frequency radiation acc. to IEC 61000-4-6  | 0.15-80Mhz at 10V                           |
| Field-bound parasitic coupling acc. to IEC 61000-4-3                          | 10 V/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 | No |
|---|----|

#### Certificates/ approvals:

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

| Declaration of Conformity   | Test Certificates                                 | Shipping Approval   |
|---|---|---|
| <br>EG-Konf. | <a href="#">Typprüfbescheinigung/Werkszeugnis</a> | <br>BUREAU VERITAS |
|   |   | <br>DNV            |
|   |   | <br>LRS          |
|   |   | <br>PRS          |

| Shipping Approval   | other                             |
|---|-----------------------------------|
| <br>RINA | <a href="#">Umweltbestätigung</a> |
| <br>RMRS |                                   |

#### Further information

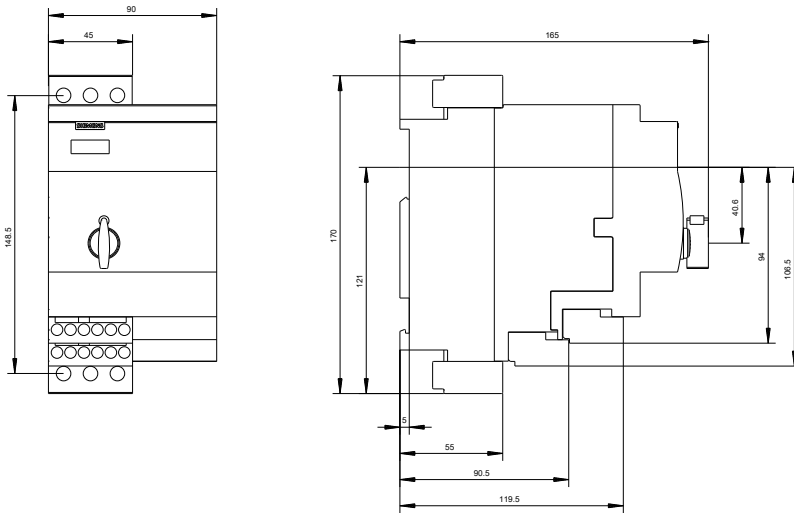
- Information- and Downloadcenter (Catalogs, Brochures,...)  
<http://www.siemens.com/industrial-controls/catalogs>
- Industry Mall (Online ordering system)  
<http://www.siemens.com/industrymall>
- Cax online generator  
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA62501AP32>

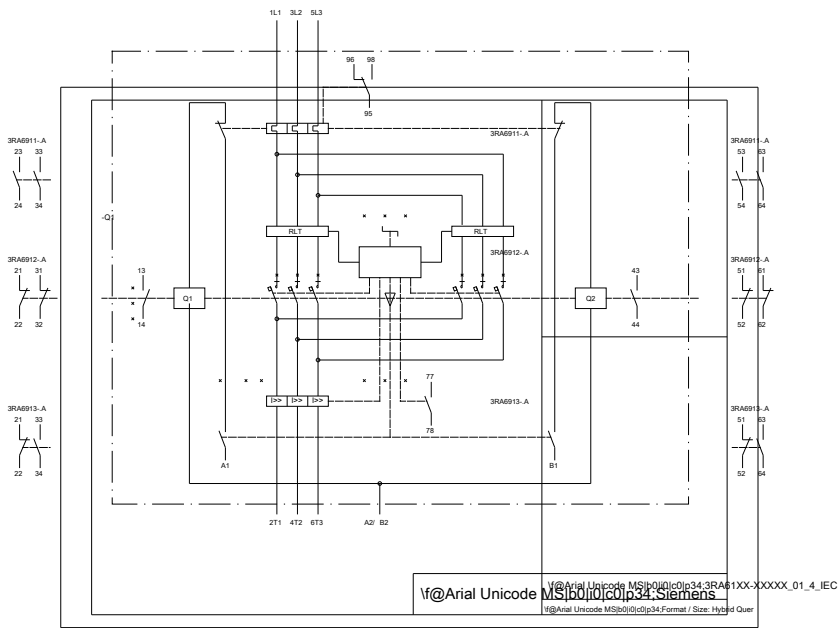
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**

<https://support.industry.siemens.com/cs/ww/en/ps/3RA62501AP32>

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

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