

SIRIUS, COMPACT STARTER, REVERSING STARTER 690 V, 24 V AC/DC, 50 ... 60 HZ, 3 ... 12 A, IP20, MAIN CIRCUIT CONNECTION: PLUG-IN, W/O TERMINALS, AUXILIARY CIRCUIT CONNECTION: PLUG-IN, W/O TERMINALS



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

### General technical data

|                                                       |                                                                                  |
|-------------------------------------------------------|----------------------------------------------------------------------------------|
| <b>Product function</b>                               |                                                                                  |
| • Control circuit interface to parallel wiring        | Yes                                                                              |
| <b>Product extension</b>                              |                                                                                  |
| • Auxiliary switch                                    | Yes                                                                              |
| <b>Insulation voltage</b>                             |                                                                                  |
| • rated value                                         | 690 V                                                                            |
| <b>Degree of pollution</b>                            | 3                                                                                |
| <b>Surge voltage resistance rated value</b>           | 6 000 V                                                                          |
| <b>maximum permissible voltage for safe isolation</b> |                                                                                  |
| • between auxiliary and auxiliary circuit             | 250 V                                                                            |
| • between control and auxiliary circuit               | 300 V                                                                            |
| • between main and auxiliary circuit                  | 400 V                                                                            |
| <b>Protection class IP</b>                            | IP20                                                                             |
| <b>Shock resistance</b>                               | a=60 m/s <sup>2</sup> (6g) with 10 ms per 3 shocks in all axes                   |
| <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>                        |                                                 |
| • 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                                        | 100 000                                         |
| • at AC-15 at 6 A at 230 V typical                                       | 500 000                                         |
| <b>Electrical endurance (switching cycles) of the signaling contacts</b> |                                                 |
| • at DC-13 at 6 A at 24 V typical                                        | 100 000                                         |
| • at AC-15 at 6 A at 230 V typical                                       | 500 000                                         |
| <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                                               |

#### Ambient conditions

|                                                                |                |
|----------------------------------------------------------------|----------------|
| <b>Installation altitude at height above sea level maximum</b> | 2 000 m        |
| <b>Ambient temperature</b>                                     |                |
| • during operation                                             | -20 ... +60 °C |
| • during storage                                               | -55 ... +80 °C |
| • during transport                                             | -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 pick-up value current of the current-dependent overload release</b> | 3 ... 12 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                                                            | 5.5 kW              |
| • at 500 V rated value                                                            | 5.5 kW              |
| • at 690 V rated value                                                            | 7.5 kW              |
| <b>Operating voltage</b>                                                          |                     |
| • at AC-3 rated value maximum                                                     | 690 V               |
| <b>Operating current</b>                                                          |                     |
| • at AC at 400 V rated value                                                      | 12 A                |
| • at AC-43                                                                        |                     |
| — at 400 V rated value                                                            | 11.5 A              |
| — at 500 V rated value                                                            | 12.4 A              |
| — at 690 V rated value                                                            | 8.9 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>                                            | AC                         |
| <b>Control supply voltage 1 at AC</b>                             |                            |
| • at 50 Hz rated value                                            | 24 V                       |
| • at 60 Hz rated value                                            | 24 V                       |
| <b>Control supply voltage 1</b>                                   |                            |
| • at DC rated value                                               | 24 V                       |
| <b>Control supply voltage frequency 1 rated value</b>             | 50 Hz                      |
| <b>Control supply voltage frequency 2 rated value</b>             | 60 Hz                      |
| <b>Holding power</b>                                              |                            |
| • at AC maximum                                                   | 2.8 W                      |
| • 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                                          | 2                          |
| • of instantaneous short-circuit trip unit for signaling contact  | 1                          |
| <b>Number of CO contacts</b>                                      |                            |
| • of the current-dependent overload release for signaling contact | 1                          |
| <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                                            | 12 A                       |

|                                                                                                                                                                                                                                                                                                                   |                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• at 600 V rated value</li> </ul>                                                                                                                                                                                                                                          | 12 A                                                                                                |
| <b>Yielded mechanical performance [hp]</b> <ul style="list-style-type: none"> <li>• for three-phase AC motor <ul style="list-style-type: none"> <li>— at 200/208 V rated value</li> <li>— at 220/230 V rated value</li> <li>— at 460/480 V rated value</li> <li>— at 575/600 V rated value</li> </ul> </li> </ul> | 3 hp<br>3 hp<br>7.5 hp<br>10 hp                                                                     |
| <b>Contact rating of auxiliary contacts according 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 protection

|                                                                                                                                                                                                                                                                                                                                                         |                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
| <b>Product function Short circuit protection</b>                                                                                                                                                                                                                                                                                                        | Yes                                                        |
| <b>Design of the fuse link</b> <ul style="list-style-type: none"> <li>• for short-circuit protection of the auxiliary switch required</li> <li>• for short-circuit protection of the signaling switch of the short-circuit release required</li> <li>• for short-circuit protection of the signaling switch of the overload release required</li> </ul> | fuse gL/gG: 10 A<br><br>6A gL/gG/400V<br><br>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>          | plug-in without terminals<br>plug-in without terminals |

### Safety related data

|                                                                                                                                             |              |
|---------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| <b>B10 value</b>                                                                                                                            |              |
| <ul style="list-style-type: none"> <li>• with high demand rate acc. to SN 31920</li> </ul>                                                  | 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>Failure rate [FIT]</b>                                                                                                                   |              |
| <ul style="list-style-type: none"> <li>• with low demand rate acc. to SN 31920</li> </ul>                                                   | 100 FIT      |

|                                                                    |      |
|--------------------------------------------------------------------|------|
| T1 value for proof test interval or service life acc. to IEC 61508 | 20 y |
|--------------------------------------------------------------------|------|

| Communication/ Protocol            |    |
|------------------------------------|----|
| Product function Bus communication | No |
| Protocol is supported              | No |
| • IO-Link protocol                 |    |

| Electromagnetic compatibility                        |                            |
|------------------------------------------------------|----------------------------|
| 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 |



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

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

| Further information                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Information- and Downloadcenter (Catalogs, Brochures,...)</b><br><a href="http://www.siemens.com/industrial-controls/catalogs">http://www.siemens.com/industrial-controls/catalogs</a>                                      |
| <b>Industry Mall (Online ordering system)</b><br><a href="https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA6250-0DB30">https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA6250-0DB30</a> |

**Cax online generator**

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA6250-0DB30>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA6250-0DB30>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA6250-0DB30&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6250-0DB30&lang=en)



