

Fuseless motor starter Direct start 600VAC Size S0 0.9-1.25A 110/120VAC 50/60Hz screw connection For snapping onto 60 mm busbar systems Type of coordination 2 IQ = 150 KA Also full fills type Of coordination 1 1NO+1NC (MSP) 1NO+1NC (contactor)

|                                                                                            |                               |
|--------------------------------------------------------------------------------------------|-------------------------------|
| <b>product brand name</b>                                                                  | SIRIUS                        |
| <b>product designation</b>                                                                 | non-fused motor starter 3RA2  |
| <b>design of the product</b>                                                               | direct starter                |
| <b>manufacturer's article number</b>                                                       |                               |
| • of the supplied contactor                                                                | <a href="#">3RT2023-1AK60</a> |
| • of the supplied circuit-breakers                                                         | <a href="#">3RV2011-0KA15</a> |
| • of the supplied busbar adapter                                                           | <a href="#">8US1251-5NT10</a> |
| • of the supplied link module                                                              | <a href="#">3RA2921-1AA00</a> |
| <b>General technical data</b>                                                              |                               |
| <b>size of the circuit-breaker</b>                                                         | S00                           |
| <b>size of load feeder</b>                                                                 | S0                            |
| product extension auxiliary switch                                                         | Yes                           |
| insulation voltage with degree of pollution 3 at AC rated value                            | 690 V                         |
| <b>degree of pollution</b>                                                                 | 3                             |
| <b>surge voltage resistance rated value</b>                                                | 6 kV                          |
| <b>shock resistance according to IEC 60068-2-27</b>                                        | 6g / 11 ms                    |
| mechanical service life (operating cycles) of contactor typical                            | 10 000 000                    |
| <b>type of coordination</b>                                                                | 2                             |
| <b>Weight</b>                                                                              | 1.06 kg                       |
| <b>Ambient conditions</b>                                                                  |                               |
| <b>ambient temperature</b>                                                                 |                               |
| • during operation                                                                         | -20 ... +60 °C                |
| • during storage                                                                           | -50 ... +80 °C                |
| • during transport                                                                         | -55 ... +80 °C                |
| <b>Main circuit</b>                                                                        |                               |
| <b>number of poles for main current circuit</b>                                            | 3                             |
| <b>design of the switching contact</b>                                                     | electromechanical             |
| <b>adjustable current response value current of the current-dependent overload release</b> | 0.9 ... 1.25 A                |
| <b>operating voltage</b>                                                                   |                               |
| • rated value                                                                              | 690 V                         |
| • at AC-3 rated value maximum                                                              | 690 V                         |
| <b>operating frequency rated value</b>                                                     | 50 ... 60 Hz                  |
| operational current at AC-3 at 400 V rated value                                           | 1.1 A                         |
| operating power at AC-3                                                                    |                               |
| • at 400 V rated value                                                                     | 370 W                         |
| • at 500 V rated value                                                                     | 550 W                         |
| • at 690 V rated value                                                                     | 750 W                         |
| <b>Control circuit/ Control</b>                                                            |                               |
| <b>control supply voltage at AC</b>                                                        |                               |
| • at 50 Hz rated value                                                                     | 110 V                         |
| • at 50 Hz rated value                                                                     | 88 ... 121 V                  |
| • at 60 Hz rated value                                                                     | 120 V                         |
| • at 60 Hz rated value                                                                     | 96 ... 132 V                  |
| <b>apparent holding power of magnet coil at AC</b>                                         | 7.2 VA                        |
| <b>inductive power factor with the holding power of the coil</b>                           | 0.28                          |
| <b>Auxiliary circuit</b>                                                                   |                               |
| <b>number of NC contacts for auxiliary contacts</b>                                        | 2                             |
| <b>number of NO contacts for auxiliary contacts</b>                                        | 2                             |

| Protective and monitoring functions                                                            |                                                  |       |
|------------------------------------------------------------------------------------------------|--------------------------------------------------|-------|
| trip class                                                                                     | CLASS 10                                         |       |
| design of the overload release                                                                 | thermal (bimetallic)                             |       |
| response value current of instantaneous short-circuit trip unit                                | 16.25 A                                          |       |
| UL/CSA ratings                                                                                 |                                                  |       |
| full-load current (FLA) for 3-phase AC motor                                                   |                                                  |       |
| • at 480 V rated value                                                                         | 1.19 A                                           |       |
| • at 600 V rated value                                                                         | 1.25 A                                           |       |
| yielded mechanical performance [hp]                                                            |                                                  |       |
| • for 3-phase AC motor                                                                         |                                                  |       |
| — at 460/480 V rated value                                                                     | 0.5 hp                                           |       |
| — at 575/600 V rated value                                                                     | 0.5 hp                                           |       |
| Short-circuit protection                                                                       |                                                  |       |
| product function short circuit protection                                                      | Yes                                              |       |
| design of the short-circuit trip                                                               | magnetic                                         |       |
| conditional short-circuit current (Iq)                                                         |                                                  |       |
| • at 400 V according to IEC 60947-4-1 rated value                                              | 153 000 A                                        |       |
| Installation/ mounting/ dimensions                                                             |                                                  |       |
| mounting position                                                                              | vertical                                         |       |
| fastening method                                                                               | for snapping onto 60 mm busbar systems           |       |
| height                                                                                         | 260 mm                                           |       |
| width                                                                                          | 45 mm                                            |       |
| depth                                                                                          | 155 mm                                           |       |
| required spacing                                                                               |                                                  |       |
| • for grounded parts                                                                           |                                                  |       |
| — forwards                                                                                     | 10 mm                                            |       |
| — backwards                                                                                    | 0 mm                                             |       |
| — upwards                                                                                      | 30 mm                                            |       |
| — at the side                                                                                  | 9 mm                                             |       |
| — downwards                                                                                    | 10 mm                                            |       |
| • for live parts                                                                               |                                                  |       |
| — forwards                                                                                     | 10 mm                                            |       |
| — backwards                                                                                    | 0 mm                                             |       |
| — upwards                                                                                      | 30 mm                                            |       |
| — downwards                                                                                    | 10 mm                                            |       |
| — at the side                                                                                  | 9 mm                                             |       |
| Connections/ Terminals                                                                         |                                                  |       |
| type of electrical connection for main current circuit                                         | screw-type terminals                             |       |
| type of connectable conductor cross-sections for main contacts stranded                        | 1 ... 10 mm², 2x (2.5 ... 6 mm²)                 |       |
| connectable conductor cross-section for main contacts finely stranded with core end processing | 1 ... 6 mm²                                      |       |
| Safety related data                                                                            |                                                  |       |
| proportion of dangerous failures with high demand rate according to SN 31920                   | 73 %                                             |       |
| B10 value with high demand rate according to SN 31920                                          | 1 000 000                                        |       |
| Electrical Safety                                                                              |                                                  |       |
| protection class IP on the front according to IEC 60529                                        | IP20                                             |       |
| touch protection on the front according to IEC 60529                                           | finger-safe, for vertical contact from the front |       |
| Approvals Certificates                                                                         |                                                  |       |
| General Product Approval                                                                       | For use in hazardous locations                   | other |



[Confirmation](#)

## Environment

[Environmental Con-](#)

[firmations](#)

#### Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA2125-0KD23-0AK6>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2125-0KD23-0AK6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-0KD23-0AK6>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2125-0KD23-0AK6&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2125-0KD23-0AK6&lang=en)

Characteristic: Tripping characteristics,  $I^2t$ , Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-0KD23-0AK6/char>

Further characteristics (e.g. electrical endurance, switching frequency)

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2125-0KD23-0AK6&objecttype=14&gridview=view1>

last modified:

12/15/2020 