

Fuseless motor starter Direct start 600VAC Size S2 42-52Amp 110/120VAC 50/60Hz screw connection For screw mounting Or 35 mm rail-mounting Type of coordination 2 IQ = 100 KA Also full fills type Of coordination 1 1NO+1NC (MSP) 1NO+1NC (contactor)

|                                                                                     |                               |
|-------------------------------------------------------------------------------------|-------------------------------|
| product brand name                                                                  | SIRIUS                        |
| product designation                                                                 | non-fused motor starter 3RA2  |
| design of the product                                                               | direct starter                |
| manufacturer's article number                                                       |                               |
| • of the supplied contactor                                                         | <a href="#">3RT2036-1AK60</a> |
| • of the supplied circuit-breakers                                                  | <a href="#">3RV2031-4WA15</a> |
| • of the supplied link module                                                       | <a href="#">3RA2931-1AA00</a> |
| <b>General technical data</b>                                                       |                               |
| size of the circuit-breaker                                                         | S2                            |
| size of load feeder                                                                 | S2                            |
| product extension auxiliary switch                                                  | Yes                           |
| insulation voltage with degree of pollution 3 at AC rated value                     | 690 V                         |
| degree of pollution                                                                 | 3                             |
| surge voltage resistance rated value                                                | 6 kV                          |
| shock resistance according to IEC 60068-2-27                                        | 6g / 11 ms                    |
| mechanical service life (operating cycles) of contactor typical                     | 10 000 000                    |
| type of assignment                                                                  | 2                             |
| <b>Ambient conditions</b>                                                           |                               |
| ambient temperature                                                                 |                               |
| • during operation                                                                  | -20 ... +60 °C                |
| • during storage                                                                    | -50 ... +80 °C                |
| • during transport                                                                  | -55 ... +80 °C                |
| <b>Main circuit</b>                                                                 |                               |
| number of poles for main current circuit                                            | 3                             |
| design of the switching contact                                                     | electromechanical             |
| adjustable current response value current of the current-dependent overload release | 42 ... 52 A                   |
| operating voltage                                                                   |                               |
| • rated value                                                                       | 690 V                         |
| • at AC-3 rated value maximum                                                       | 690 V                         |
| operating frequency rated value                                                     | 50 ... 60 Hz                  |
| operational current at AC-3 at 400 V rated value                                    | 41 A                          |
| operating power at AC-3                                                             |                               |
| • at 400 V rated value                                                              | 22 000 W                      |
| <b>Control circuit/ Control</b>                                                     |                               |
| control supply voltage at AC                                                        |                               |
| • 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                  |
| apparent holding power of magnet coil at AC                                         | 16 VA                         |
| inductive power factor with the holding power of the coil                           | 0.37                          |
| <b>Auxiliary circuit</b>                                                            |                               |
| number of NC contacts for auxiliary contacts                                        | 2                             |
| number of NO contacts for auxiliary contacts                                        | 2                             |
| <b>Protective and monitoring functions</b>                                          |                               |
| trip class                                                                          | CLASS 10                      |
| design of the overload release                                                      | thermal (bimetallic)          |
| response value current of instantaneous short-circuit trip unit                     | 676 A                         |

| UL/CSA ratings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                       |                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|---------------------------|
| full-load current (FLA) for 3-phase AC motor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                       |                           |
| • at 480 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 52 A                                                                  |                           |
| • at 600 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 52 A                                                                  |                           |
| yielded mechanical performance [hp]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                       |                           |
| • for single-phase AC motor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                       |                           |
| — at 230 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 10 hp                                                                 |                           |
| • for 3-phase AC motor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                       |                           |
| — at 200/208 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 15 hp                                                                 |                           |
| — at 220/230 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 15 hp                                                                 |                           |
| — at 460/480 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 40 hp                                                                 |                           |
| — at 575/600 V rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 50 hp                                                                 |                           |
| Short-circuit protection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                       |                           |
| product function short circuit protection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Yes                                                                   |                           |
| design of the short-circuit trip                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | magnetic                                                              |                           |
| conditional short-circuit current (I <sub>q</sub> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                       |                           |
| • at 400 V according to IEC 60947-4-1 rated value                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 100 000 A                                                             |                           |
| Installation/ mounting/ dimensions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                       |                           |
| mounting position                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | vertical                                                              |                           |
| fastening method                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Snap-mounted to DIN rail or screw-mounted with additional push-in lug |                           |
| height                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 274 mm                                                                |                           |
| width                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 55 mm                                                                 |                           |
| depth                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 150 mm                                                                |                           |
| required spacing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                       |                           |
| • for grounded parts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                       |                           |
| — forwards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 0 mm                                                                  |                           |
| — backwards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 0 mm                                                                  |                           |
| — upwards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 50 mm                                                                 |                           |
| — at the side                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 10 mm                                                                 |                           |
| — downwards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 10 mm                                                                 |                           |
| • for live parts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                       |                           |
| — forwards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 0 mm                                                                  |                           |
| — backwards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 0 mm                                                                  |                           |
| — upwards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 50 mm                                                                 |                           |
| — downwards                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 10 mm                                                                 |                           |
| — at the side                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 10 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 ... 50 mm², 2x (1 ... 25 mm²)                                       |                           |
| connectable conductor cross-section for main contacts finely stranded with core end processing                                                                                                                                                                                                                                                                                                                                                                                                                                               | 1 ... 35 mm²                                                          |                           |
| Safety related data                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                       |                           |
| B10 value with high demand rate according to SN 31920                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1 000 000                                                             |                           |
| proportion of dangerous failures with high demand rate according to SN 31920                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 73 %                                                                  |                           |
| 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                      |                           |
| Certificates/ approvals                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                       |                           |
| General Product Approval                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | For use in hazard-<br>ous locations                                   | Declaration of Conformity |
| <div><div><a href="#">Confirmation</a></div><div></div><div></div><div></div><div></div><div></div></div> |                                                                       |                           |
| Test Certificates                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Marine / Shipping                                                     |                           |

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



| Marine / Shipping                                                                         | other                                                                                     | Railway                                                                                     | Dangerous Good               |
|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------|
| <br>RINA | <br>RMRS | <br>DNV GL | <a href="#">Confirmation</a> |

[Vibration and Shock](#)

[Transport Information](#)

#### Further information

Siemens has decided to exit the Russian market (see here).

<https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business>

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

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

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=3RA2135-4WA36-0AK6>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2135-4WA36-0AK6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2135-4WA36-0AK6>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA2135-4WA36-0AK6&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2135-4WA36-0AK6&lang=en)

Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2135-4WA36-0AK6/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2135-4WA36-0AK6&objecttype=14&gridview=view1>

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