

Fuseless motor starter Direct start 600VAC Size S0 0.9-1.25A
 220/240VAC 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 (contactor)



| | |
|--|--|
| Product brand name | SIRIUS |
| Product designation | non-fused motor starter 3RA2 |
| Design of the product | direct starter |
| Manufacturer's article number | |
| <ul style="list-style-type: none"> • of the supplied contactor • of the supplied circuit-breakers • of the supplied busbar adapter • of the supplied link module | 3RT2023-1AP60 3RV2011-0KA10 8US1251-5NT10 3RA2921-1AA00 |

| General technical data | |
|--|-------|
| Size of the circuit-breaker | S00 |
| Size of load feeder | S0 |
| Product extension | |
| <ul style="list-style-type: none"> • Auxiliary switch | Yes |
| Insulation voltage | |
| <ul style="list-style-type: none"> • with degree of pollution 3 at AC rated value | 690 V |
| Degree of pollution | 3 |
| Surge voltage resistance rated value | 6 kV |
| Protection class IP | |
| <ul style="list-style-type: none"> • on the front | IP20 |

| | |
|---|------------|
| • of the terminal | IP00 |
| Shock resistance | |
| • acc. to IEC 60068-2-27 | 6g / 11 ms |
| Mechanical service life (switching cycles) | |
| • of contactor typical | 10 000 000 |
| Type of assignment | 2 |

Main circuit

| | |
|---|-------------------|
| Number of poles for main current circuit | 3 |
| Design of the switching contact | electromechanical |
| Adjustable pick-up value current of the current-dependent overload release | 0.9 ... 1.25 A |
| Operating voltage | |
| • rated value | 690 V |
| • at AC-3 rated value maximum | 690 V |
| Operating frequency rated value | 50 ... 60 Hz |
| Operating 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 |

Control circuit/ Control

| | |
|--|---------------|
| Control supply voltage at AC | |
| • at 50 Hz rated value | 220 V |
| • at 50 Hz rated value | 176 ... 242 V |
| • at 60 Hz rated value | 240 V |
| • at 60 Hz rated value | 192 ... 264 V |
| Apparent holding power of magnet coil at AC | 7.2 V·A |
| Inductive power factor with the holding power of the coil | 0.28 |

Auxiliary circuit

| | |
|---|---|
| Number of NC contacts for auxiliary contacts | 1 |
| Number of NO contacts for auxiliary contacts | 1 |

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 three-phase AC motor | |
| <ul style="list-style-type: none"> • at 480 V rated value • at 600 V rated value | <p>1.19 A</p> <p>1.25 A</p> |
| Yielded mechanical performance [hp] | |
| <ul style="list-style-type: none"> • for three-phase AC motor <ul style="list-style-type: none"> — at 460/480 V rated value — at 575/600 V rated value | <p>0.5 hp</p> <p>0.5 hp</p> |

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|--|-----------|
| Short-circuit protection | |
| Product function Short circuit protection | Yes |
| Design of the short-circuit trip | magnetic |
| Conditional short-circuit current (I_q) | |
| <ul style="list-style-type: none"> • at 400 V acc. to IEC 60947-4-1 rated value | 153 000 A |




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|--|---|
| Installation/ mounting/ dimensions | |
| Mounting position | vertical |
| Mounting type | for snapping onto 60 mm busbar systems |
| Height | 260 mm |
| Width | 45 mm |
| Depth | 155 mm |
| Required spacing | |
| <ul style="list-style-type: none"> • for grounded parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — at the side — downwards • for live parts <ul style="list-style-type: none"> — forwards — Backwards — upwards — downwards — at the side | <p>10 mm</p> <p>0 mm</p> <p>30 mm</p> <p>9 mm</p> <p>10 mm</p> <p>10 mm</p> <p>0 mm</p> <p>30 mm</p> <p>10 mm</p> <p>9 mm</p> |

| | |
|--|--|
| Connections/ Terminals | |
| Type of electrical connection | |
| <ul style="list-style-type: none"> • for main current circuit | screw-type terminals |
| Type of connectable conductor cross-sections | |
| <ul style="list-style-type: none"> • for main contacts <ul style="list-style-type: none"> — stranded • at AWG conductors for main contacts | <p>1 ... 10 mm², 2x (2.5 ... 6 mm²)</p> <p>2x (16 ... 12), 2x (14 ... 8)</p> |
| Connectable conductor cross-section for main contacts | |
| <ul style="list-style-type: none"> • finely stranded with core end processing | 1 ... 6 mm ² |

Safety related data

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|--|-----------|
| B10 value | |
| • with high demand rate acc. to SN 31920 | 1 000 000 |
| Proportion of dangerous failures | |
| • with high demand rate acc. to SN 31920 | 73 % |

Certificates/ approvals

| General Product Approval | For use in hazardous locations | Declaration of Conformity | other |
|---|---|---|------------------------------|
|  |  ATEX |  EG-Konf. | Confirmation |

Further information

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=3RA2120-0KD23-0AP6>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-0KD23-0AP6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-0KD23-0AP6>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-0KD23-0AP6&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-0KD23-0AP6/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-0KD23-0AP6&objecttype=14&gridview=view1>







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