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## Data sheet 3RA2125-4DD27-0AP6

FUSELESS MOTOR STARTER DIRECT START 600V AC SZ S0 20-25A 220/240V AC 50/60HZ SCREW CONNECTION FOR SNAPPING ONTO 60 MM BUSBAR SYSTEMS TYPE OF COORDINATION 2 IQ = 150 KA ALSO FULFILLS 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 | 3RT2027-1AP60 |
| ● of the supplied circuit-breakers | 3RV2021-4DA15 |
| ● of the supplied busbar adapter | 8US1251-5NT10 |
| ● of the supplied link module | 3RA2921-1AA00 |
| **General technical data** | |
| **size of the circuit-breaker** | S0 |
| **size of load feeder** | S0 |
| 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** | 6 g / 11 ms |
| mechanical service life (operating cycles) of contactor typical | 10 000 000 |
| **type of coordination** | 2 |
| **Net Weight** | 1.06 kg |
| **Ambient conditions** | |
| **ambient temperature** | |
| ● during operation | -20 ... +60 °C |
| ● during storage | -50 ... +80 °C |
| ● during transport | -55 ... +80 °C |
| **Main circuit** | |
| **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** | 20 ... 25 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 | 22 A |
| operating power at AC-3 | |
| ● at 400 V rated value | 11 000 W |
| ● at 500 V rated value | 15 000 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** | 9.4 V·A |
| **inductive power factor with the holding power of the coil** | 0.28 |
| **Auxiliary circuit** | |
| **number of NC contacts for auxiliary contacts** | 2 |
| **number of NO contacts for auxiliary contacts** | 2 |


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| | |
|---|---|
| **Protective and monitoring functions** | |
| **trip class** | CLASS 10 |
| **design of the overload release** | thermal (bimetallic) |
| response value current of instantaneous short-circuit trip unit | 325 A |
| **UL/CSA ratings** | |
| **full-load current (FLA) for 3-phase AC motor** | |
| ● at 480 V rated value | 22.2 A |
| ● at 600 V rated value | 21.9 A |
| **yielded mechanical performance [hp]** | |
| ● for single-phase AC motor | |
| — at 110/120 V rated value | 2 hp |
| — at 230 V rated value | 3 hp |
| ● for 3-phase AC motor | |
| — at 200/208 V rated value | 5 hp |
| — at 220/230 V rated value | 7.5 hp |
| — at 460/480 V rated value | 15 hp |
| — at 575/600 V rated value | 20 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 |
| ● at 500 V according to IEC 60947-4-1 rated value | 100 000 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** | |

| Environment | General Product Approval | For use in hazard-ous locations |
|---|---|---|


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Environmental Confirmations

| For use in hazardous locations | Test Certificates | | Maritime application | | |
|---|---|---|---|---|---|
| EG-Konf. | Type Test Certificates/Test Report | Special Test Certificate | ABS | BUREAU VERITAS | DNV |

| Maritime application | | | other | | |
|---|---|---|---|---|---|
| LRS | PRS | RINA | Confirmation | Confirmation | 产品合格 QC PASS |

| Railway |
|---|
| Special Test Certificate |

## 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=3RA2125-4DD27-0AP6
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/3RA2125-4DD27-0AP6
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**
https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2125-4DD27-0AP6&lang=en
**Cax online generator**
https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2125-4DD27-0AP6
**Kennlinien**
https://curves.simaris.siemens.com/curves/3RA2125-4DD27-0AP6

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