SIEMENS

## Data sheet 3RA6250-1DB34

SIRIUS Compact load feeder Reversing starter 690 V 24 V AC/DC 50...60 Hz 3...12 A IP20 Connection main circuit: Screw terminal Connection control circuit: plug-in, without terminals

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| **product brand name** | SIRIUS |
| **product designation** | compact starter |
| **design of the product** | reversing starter |
| **product type designation** | 3RA62 |
| **General technical data** | |
| product function control circuit interface to parallel wiring | Yes |
| product extension auxiliary switch | Yes |
| **power loss [W] for rated value of the current** | |
| ● at AC in hot operating state | 1.8 W |
| ● at AC in hot operating state per pole | 0.6 W |
| ● without load current share typical | 2.9 W |
| **insulation voltage rated value** | 690 V |
| **degree of pollution** | 3 |
| **surge voltage resistance rated value** | 6 000 V |
| **maximum permissible voltage for protective separation** | |
| ● between main and auxiliary circuit | 400 V |
| ● between auxiliary and auxiliary circuit | 250 V |
| ● between control and auxiliary circuit | 300 V |
| **degree of protection NEMA rating** | other |
| **shock resistance** | a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes |
| **vibration resistance** | f= 4 ... 5.8 Hz, d= 15 mm; f= 5.8 ... 500 Hz, a= 20 m/s²; 10 cycles |
| **mechanical service life (operating cycles)** | |
| ● of the main contacts typical | 10 000 000 |
| ● of auxiliary contacts typical | 10 000 000 |
| ● of the signaling contacts typical | 10 000 000 |
| **electrical endurance (operating cycles) of auxiliary contacts** | |
| ● at DC-13 at 6 A at 24 V typical | 30 000 |
| ● at AC-15 at 6 A at 230 V typical | 200 000 |
| **type of assignment** | continous operation according to IEC 60947-6-2 |
| **reference code according to IEC 81346-2** | Q |
| **Substance Prohibitance (Date)** | 05/01/2012 |
| **Ambient conditions** | |
| installation altitude at height above sea level maximum | 2 000 m |
| **ambient temperature** | |
| ● during operation | -20 ... +60 °C |
| ● during storage | -55 ... +80 °C |
| ● during transport | -55 ... +80 °C |
| relative humidity during operation | 10 ... 90 % |
| **Main circuit** | |
| **number of poles for main current circuit** | 3 |

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| **adjustable current response value current of the current-dependent overload release** | 3 ... 12 A |
| **formula for making capacity limit current** | 12 x Ie |
| **formula for limit current breaking capacity** | 10 x Ie |
| **yielded mechanical performance for 4-pole AC motor** | |
| ● at 400 V rated value | 5.5 kW |
| ● at 500 V rated value | 5.5 kW |
| ● at 690 V rated value | 7.5 kW |
| operating voltage at AC-3 rated value maximum | 690 V |
| **operational current** | |
| ● at AC at 400 V rated value | 12 A |
| ● at AC-3 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 |
| **operating power** | |
| ● at AC-3 at 400 V rated value | 5.5 kW |
| ● at AC-43 | |
| — at 400 V rated value | 5 500 W |
| — at 500 V rated value | 5 500 W |
| — at 690 V rated value | 7 500 W |
| **no-load switching frequency** | 3 600 1/h |
| **operating frequency** | |
| ● at AC-41 according to IEC 60947-6-2 maximum | 750 1/h |
| ● at AC-43 according to IEC 60947-6-2 maximum | 250 1/h |
| **Control circuit/ Control** | |
| **type of voltage** | AC/DC |
| **control supply voltage 1 at AC** | |
| ● at 50 Hz rated value | 24 V |
| ● at 50 Hz | 24 ... 24 V |
| ● at 60 Hz rated value | 24 V |
| ● at 60 Hz | 24 V |
| **control supply voltage frequency** | |
| **● 1 rated value** | 50 Hz |
| **● 2 rated value** | 60 Hz |
| **control supply voltage 1** | |
| ● at DC rated value | 24 V |
| ● at DC | 24 ... 24 V |
| **holding power** | |
| ● at AC maximum | 2.8 W |
| ● at DC maximum | 2.9 W |
| **Auxiliary circuit** | |
| **number of NC contacts for auxiliary contacts** | 0 |
| **number of NO contacts for auxiliary contacts** | 2 |
| number of NO contacts of instantaneous short-circuit trip unit for signaling contact | 1 |
| number of CO contacts of the current-dependent overload release for signaling contact | 1 |
| **operational current of auxiliary contacts at AC-12 maximum** | 10 A |
| operational current of auxiliary contacts at DC-13 at 250 V | 0.27 A |
| **Protective and monitoring functions** | |
| **trip class** | CLASS 10 and 20 adjustable |
| **operating short-circuit current breaking capacity (Ics)** | |
| ● at 400 V | 53 kA |
| ● at 500 V rated value | 3 kA |
| ● at 690 V rated value | 3 kA |
| **UL/CSA ratings** | |
| **full-load current (FLA) for 3-phase AC motor** | |
| ● at 480 V rated value | 12 A |
| ● at 600 V rated value | 12 A |

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| yielded mechanical performance [hp] for 3-phase AC motor | |
| ● at 200/208 V rated value | 3 hp |
| ● at 220/230 V rated value | 3 hp |
| ● at 460/480 V rated value | 7.5 hp |
| ● at 575/600 V rated value | 10 hp |
| **contact rating of auxiliary contacts according to UL** | contacts 21-22, 13-14, 43-44 Q600 / A600, contacts 77-78 R300 / B300, contacts 95-96-98 R300 / D300 |
| **Short-circuit protection** | |
| **product function short circuit protection** | Yes |
| **design of short-circuit protection** | electromagnetic |
| **design of the fuse link** | |
| ● for short-circuit protection of the auxiliary switch required | fuse gL/gG: 10 A |
| ● for short-circuit protection of the signaling switch of the short-circuit release required | 6A gL/gG/400V |
| ● for short-circuit protection of the signaling switch of the overload release required | 4A gL/gG/400V |
| **Installation/ mounting/ dimensions** | |
| **mounting position** | any |
| ● recommended | vertical, on horizontal standard DIN rail |
| **fastening method** | screw and snap-on mounting |
| **height** | 170 mm |
| **width** | 90 mm |
| **depth** | 165 mm |
| **Connections/ Terminals** | |
| **product component removable terminal for main circuit** | Yes |
| **product component removable terminal for auxiliary and control circuit** | Yes |
| **type of electrical connection** | |
| ● for main current circuit | screw-type terminals |
| ● for auxiliary and control circuit | plug-in without terminals |
| type of connectable conductor cross-sections for main contacts | |
| ● solid | 2x (1.5 ... 6 mm²), 1x 10 mm² |
| ● finely stranded with core end processing | 2x (1.5 ... 6 mm²) |
| **type of connectable conductor cross-sections** | |
| ● for auxiliary contacts | |
| — solid | 0.5 ... 4 mm², 2x (0.5 ... 2.5 mm²) |
| — finely stranded with core end processing | 0.5 ... 2.5 mm², 2x (0.5 ... 1.5 mm²) |
| ● for AWG cables for auxiliary contacts | 2x (20 ... 14) |
| **Safety related data** | |
| B10 value with high demand rate according to SN 31920 | 3 000 000 |
| **proportion of dangerous failures** | |
| ● with low demand rate according to SN 31920 | 40 % |
| ● with high demand rate according to SN 31920 | 50 % |
| failure rate [FIT] with low demand rate according to SN 31920 | 100 FIT |
| T1 value for proof test interval or service life according to IEC 61508 | 20 a |
| **protection class IP on the front according to IEC 60529** | IP20 |
| **touch protection on the front according to IEC 60529** | finger-safe |
| **Communication/ Protocol** | |
| **product function bus communication** | No |
| **protocol is supported** | |
| ● AS-Interface protocol | No |
| ● IO-Link protocol | No |
| product function control circuit interface with IO link | No |
| **Electromagnetic compatibility** | |
| **conducted interference** | |
| ● due to burst according to IEC 61000-4-4 | 4 kV main contacts, 2 kV auxiliary contacts |
| ● due to conductor-earth surge according to IEC 61000-4-5 | 4 kV main contacts, 2 kV auxiliary contacts |
| ● due to conductor-conductor surge according to IEC 61000-4-5 | 2 kV main contacts, 1 kV auxiliary contacts |
| ● due to high-frequency radiation according to IEC 61000-4-6 | 0.15-80Mhz at 10V |

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| **field-based interference according to IEC 61000-4-3** | 10 V/m |
| **electrostatic discharge according to IEC 61000-4-2** | 8 kV |
| **conducted HF interference emissions according to CISPR11** | 150 kHz ... 30 MHz Class A |
| **field-bound HF interference emission according to CISPR11** | 30 ... 1000 MHz Class A |
| **Supply voltage** | |
| **Supply voltage required Auxiliary voltage** | No |
| **Display** | |
| **number of LEDs** | 3 |

**Certificates/ approvals**

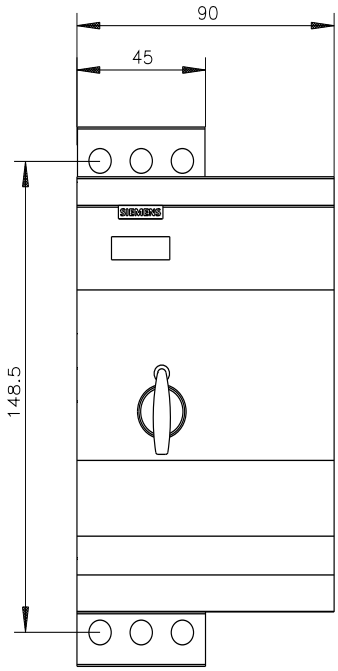
| General Product Approval | | | | EMC | Functional Safety/Safety of Machinery |
|---|---|---|---|---|---|
| CCC | Confirmation | UL | EAC | RCM | VDE |

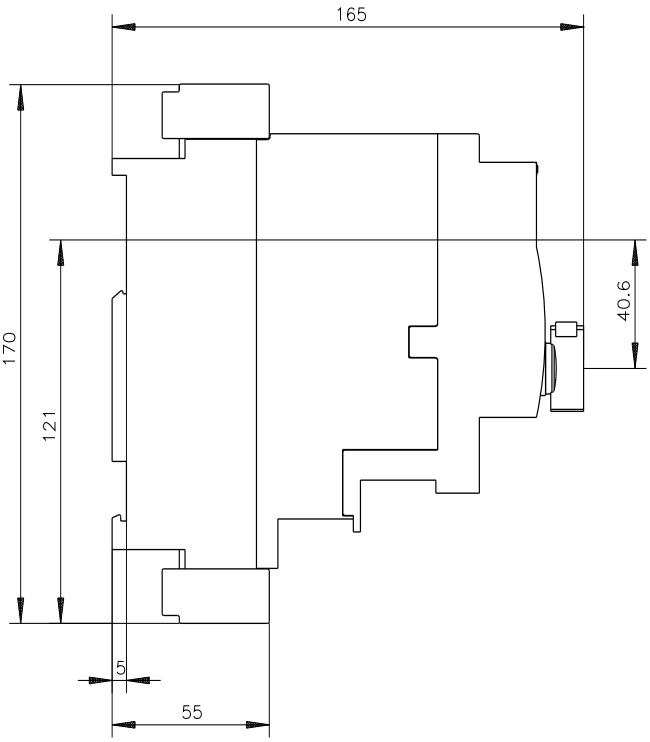
| Declaration of Conformity | | Test Certificates | Marine / Shipping | | |
|---|---|---|---|---|---|
| UKCA | CE EG-Konf. | Type Test Certificates/Test Report | ABS | DNV | LRS |

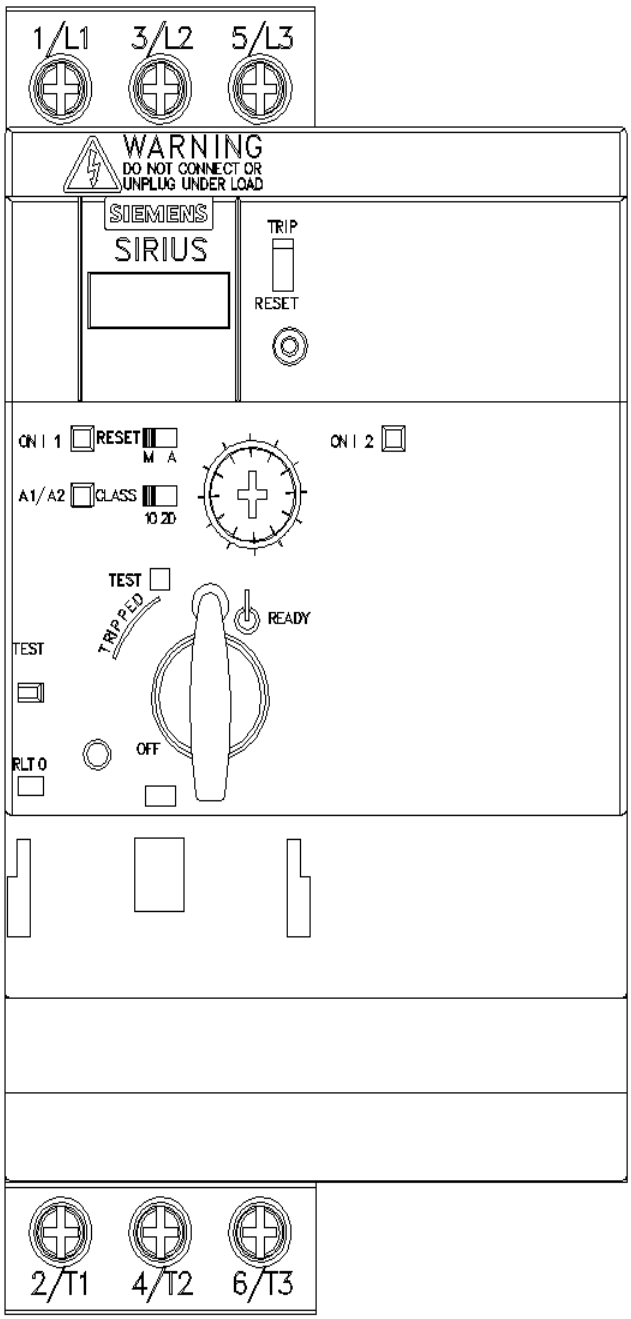
| Marine / Shipping | | other | Dangerous Good |
|---|---|---|---|
| PRS | RINA | Confirmation | Transport Information |

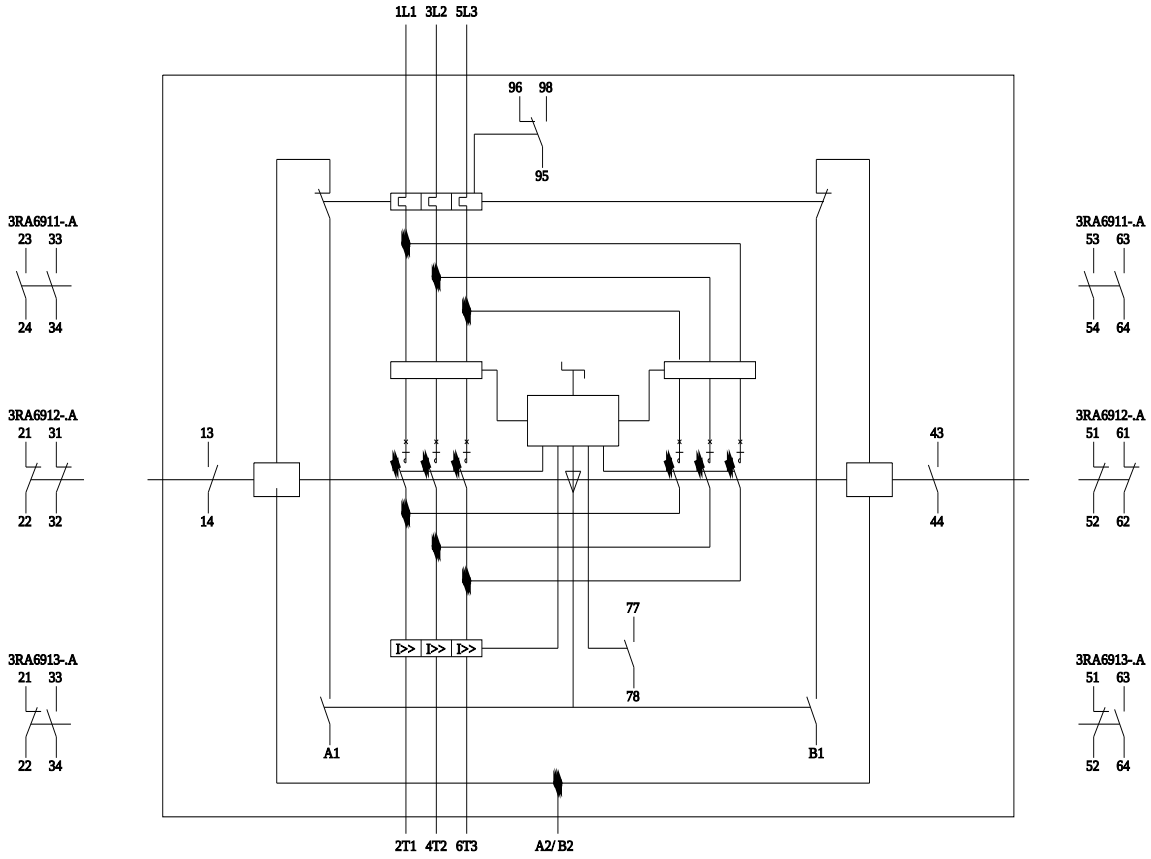
**Further information**

**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=3RA6250-1DB34
**Cax online generator**
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA6250-1DB34
**Service&Support (Manuals, Certificates, Characteristics, FAQs,...)**
https://support.industry.siemens.com/cs/ww/en/ps/3RA6250-1DB34
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6250-1DB34&lang=en
**Characteristic: Tripping characteristics, $I^2t$, Let-through current**
https://support.industry.siemens.com/cs/ww/en/ps/3RA6250-1DB34/char
**Further characteristics (e.g. electrical endurance, switching frequency)**
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6250-1DB34&objecttype=14&gridview=view1








**last modified:** 11/21/2022