SIEMENS

Data sheet 3RA6250-2CB32



SIRIUS Compact load feeder Reversing starter 690 V 24 V AC/DC 50...60 Hz 1...4 A IP20 Connection main circuit: Spring-type terminal Connection control circuit: Spring-type terminal

| 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 W | | |
| • per pole | 0.33 W | | |
| power loss [W] for rated value of the current 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 safe isolation | | | |
| 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/s ² ; 10 cycles | | |
| mechanical service life (switching 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 (switching 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 acc. to IEC 81346-2 | Q | | |
| Substance Prohibitance (Date) | 01.05.2012 | | |
| 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 |
| adjustable current response value current of the current-dependent overload release | 1 4 A |
| formula for making capacity limit current | 12 x le |
| formula for breaking capacity limit current | 10 x le |
| yielded mechanical performance for 4-pole AC motor | |
| at 400 V rated value | 1.5 kW |
| at 500 V rated value at 500 V rated value | 2.2 kW |
| at 500 V rated value at 690 V rated value | 3 kW |
| operating voltage at AC-3 rated value maximum | 690 V |
| operational current | |
| at AC at 400 V rated value | 4 A |
| at AC at 400 V rated value at AC-3 at 400 V rated value | 4 A 4 A |
| • at AC-43 | |
| — at 400 V rated value | 3.6 A |
| — at 400 V rated value — at 500 V rated value | 3.9 A |
| — at 500 V rated value — at 690 V rated value | 3.9 A 3.8 A |
| | 0.071 |
| operating power | 1.5 kW |
| at AC-3 at 400 V rated valueat AC-43 | 1.5 kW |
| | 1.500 W |
| — at 400 V rated value | 1 500 W |
| — at 500 V rated value | 2 200 W |
| — at 690 V rated value | 3 000 W |
| no-load switching frequency | 3 600 1/h |
| operating frequency | 750.4% |
| • at AC-41 acc. to IEC 60947-6-2 maximum | 750 1/h |
| • at AC-43 acc. 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 for auxiliary contacts 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 |
| breaking capacity operating short-circuit current (Ics) | |
| at 400 V | 53 kA |
| at 500 V at 500 V rated value | 3 kA |
| at 690 V rated value at 690 V rated value | 3 kA |
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| UL/CSA ratings | | | |
|--|---|--|--|
| full-load current (FLA) for 3-phase AC motor | | | |
| • at 480 V rated value | 4 A | | |
| at 400 V rated value at 600 V rated value | 4 A | | |
| yielded mechanical performance [hp] for 3-phase AC motor | | | |
| • at 200/208 V rated value | 0.75 hp | | |
| at 220/230 V rated value | 0.75 hp | | |
| at 460/480 V rated value | 2 hp | | |
| • at 575/600 V rated value | 3 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 mounting rail | | |
| fastening method | screw and snap-on mounting | | |
| height | 191 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 | spring-loaded terminals | | |
| for auxiliary and control circuit | spring-loaded terminals | | |
| type of connectable conductor cross-sections | | | |
| • for main contacts | 0 (45 0 2) 4 40 2 | | |
| — solid | 2x (1.5 6 mm²), 1x 10 mm² | | |
| — finely stranded with core end processing | 2x (1.5 6 mm²) | | |
| — finely stranded without core end processing | 2x (1.5 6 mm²) | | |
| at AWG cables for main contacts type of connectable conductor group sections | 2x (16 10), 1x 8 | | |
| type of connectable conductor cross-sections | | | |
| for auxiliary contacts solid | 2v (0.25 1.5 mm²) | | |
| — solid | 2x (0.25 1.5 mm²) | | |
| — finely stranded with core end processing | 2x (0.25 1.5 mm²) | | |
| finely stranded without core end processing at AWG cables for auxiliary contacts | 2x (0.25 1.5 mm²) | | |
| | 2x (24 16) | | |
| Safety related data | 2.000.000 | | |
| B10 value with high demand rate acc. to SN 31920 | 3 000 000 | | |
| proportion of dangerous failures • with low demand rate acc. to SN 31920 | 40 % | | |
| | 40 % 50 % | | |
| with high demand rate acc. to SN 31920 failure rate [FIT] with low demand rate acc. to SN 31920 | 100 FIT | | |
| failure rate [FIT] with low demand rate acc. to SN 31920 T1 value for proof test interval or service life acc. to | 20 y | | |
| IEC 61508 | | | |
| protection class IP on the front acc. to IEC 60529 | IP20 | | |
| touch protection on the front acc. 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 acc. to IEC 61000-4-4 | 4 kV main contacts, 2 kV auxiliary contacts | | | | |
| due to conductor-earth surge acc. to IEC 61000-4-5 | 4 kV main contacts, 2 kV auxiliary contacts | | | | |
| due to conductor-conductor surge acc. to IEC 61000-4-5 | 2 kV main contacts, 1 kV auxiliary contacts | | | | |
| due to high-frequency radiation acc. to IEC 61000- 4-6 | 0.15-80Mhz at 10V | | | | |
| field-based interference acc. to IEC 61000-4-3 | 10 V/m | | | | |
| electrostatic discharge acc. to IEC 61000-4-2 | 8 kV | | | | |
| conducted HF interference emissions acc. to CISPR11 | 150 kHz 30 MHz Class A | | | | |
| field-bound HF interference emission acc. 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

Declaration of Conformity

Test Certificates

Marine / Shipping



UK Declaration of Conformity Type Test Certificates/Test Report







Marine / Shipping

Lloyd's Register

LRS







Confirmation

other

<u>Transport Information</u>

Dangerous Good

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=3RA6250-2CB32

Cax online generator

 $\underline{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RA6250-2CB32}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA6250-2CB32

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

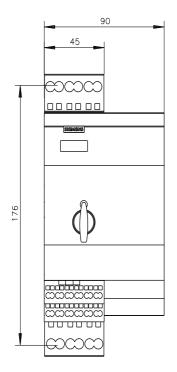
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6250-2CB32&lang=en

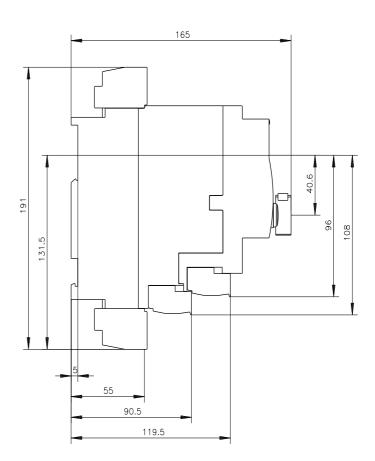
Characteristic: Tripping characteristics, I2t, Let-through current

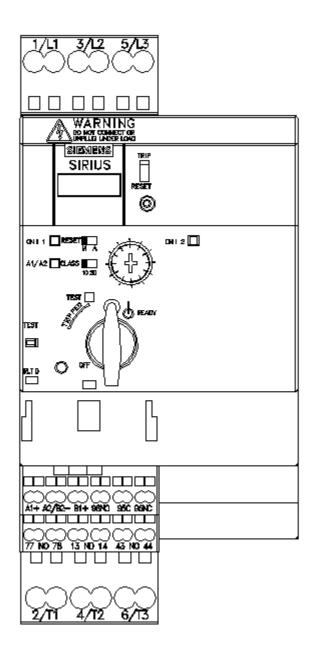
https://support.industry.siemens.com/cs/ww/en/ps/3RA6250-2CB32/char

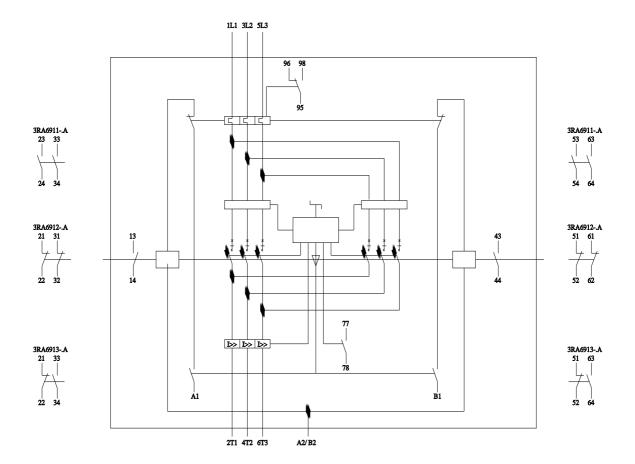
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6250-2CB32&objecttype=14&gridview=view1









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