



SIRIUS Compact load feeder Reversing starter 400 V 24 V AC/DC 50...60 Hz 8...32 A IP20 Connection main circuit: Screw terminal Connection control circuit: screw 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  |
| <b>power loss [W] for rated value of the current</b>                 |  |
| • at AC in hot operating state                                       | 5.4 W  |
| • at AC in hot operating state per pole                              | 1.8 W  |
| • without load current share typical                                 | 3.5 W  |
| <b>insulation voltage rated value</b>                                | 690 V  |
| <b>degree of pollution</b>   | 3  |
| <b>surge voltage resistance rated value</b>                          | 6 000 V  |
| <b>maximum permissible voltage for safe isolation</b>                |  |
| • between main and auxiliary circuit                                 | 400 V  |
| • between auxiliary and auxiliary circuit                            | 250 V  |
| • between control and auxiliary circuit                              | 300 V  |
| <b>degree of protection NEMA rating</b>                              | other  |
| <b>shock resistance</b>  | a=60 m/s <sup>2</sup> (6g) with 10 ms per 3 shocks in all axes                   |
| <b>vibration resistance</b>  | f= 4 ... 5.8 Hz, d= 15 mm; f= 5.8 ... 500 Hz, a= 20 m/s <sup>2</sup> ; 10 cycles |
| <b>mechanical service life (operating cycles)</b>                    |  |
| • of the main contacts typical                                       | 10 000 000   |
| • of auxiliary contacts typical                                      | 10 000 000   |
| • of the signaling contacts typical                                  | 10 000 000   |
| <b>electrical endurance (operating cycles) of auxiliary contacts</b> |  |
| • at DC-13 at 6 A at 24 V typical                                    | 30 000   |
| • at AC-15 at 6 A at 230 V typical                                   | 200 000  |
| <b>type of assignment</b>  | continuous operation according to IEC 60947-6-2                                  |
| <b>reference code according to IEC 81346-2</b>                       | Q  |
| <b>Substance Prohibitance (Date)</b>                                 | 05/01/2012   |

### Ambient conditions

|   |                |
|---|----------------|
| installation altitude at height above sea level maximum | 2 000 m        |
| <b>ambient temperature</b>                              |                |
| • during operation                                      | -20 ... +60 °C |
| • during storage  | -55 ... +80 °C |
| • during transport                                      | -55 ... +80 °C |
| relative humidity during operation                      | 10 ... 90 %    |

### Main circuit

|   |            |
|---|------------|
| <b>number of poles for main current circuit</b>         | 3          |
| <b>adjustable current response value current of the</b> | 8 ... 32 A |

|   |                     |
|---|---------------------|
| <b>current-dependent overload release</b>                 |                     |
| <b>formula for making capacity limit current</b>          | 12 x I <sub>e</sub> |
| <b>formula for limit current breaking capacity</b>        | 10 x I <sub>e</sub> |
| <b>yielded mechanical performance for 4-pole AC motor</b> |                     |
| • at 400 V rated value                                    | 15 kW               |
| operating voltage at AC-3 rated value maximum             | 400 V               |
| <b>operational current</b>                                |                     |
| • at AC at 400 V rated value                              | 32 A                |
| • at AC-3 at 400 V rated value                            | 32 A                |
| • at AC-43  |                     |
| — at 400 V rated value                                    | 29 A                |
| <b>operating power</b>                                    |                     |
| • at AC-3 at 400 V rated value                            | 15 kW               |
| • at AC-43  |                     |
| — at 400 V rated value                                    | 15 000 W            |
| <b>no-load switching frequency</b>                        | 3 600 1/h           |
| <b>operating frequency</b>                                |                     |
| • 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

|   |             |
|---|-------------|
| <b>type of voltage</b>                  | AC/DC       |
| <b>control supply voltage 1 at AC</b>   |             |
| • 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        |
| <b>control supply voltage frequency</b> |             |
| • <b>1 rated value</b>                  | 50 Hz       |
| • <b>2 rated value</b>                  | 60 Hz       |
| <b>control supply voltage 1</b>         |             |
| • at DC rated value                     | 24 V        |
| • at DC                                 | 24 ... 24 V |
| <b>holding power</b>                    |             |
| • at AC maximum                         | 3.5 W       |
| • at DC maximum                         | 3.1 W       |

#### Auxiliary circuit

|   |        |
|---|--------|
| <b>number of NC contacts for auxiliary contacts</b>                                   | 0      |
| <b>number of NO contacts for auxiliary contacts</b>                                   | 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      |
| <b>operational current of auxiliary contacts at AC-12 maximum</b>                     | 10 A   |
| operational current of auxiliary contacts at DC-13 at 250 V                           | 0.27 A |

#### Protective and monitoring functions

|   |                            |
|---|----------------------------|
| <b>trip class</b>   | CLASS 10 and 20 adjustable |
| <b>operating short-circuit current breaking capacity (I<sub>cs</sub>)</b> |                            |
| • at 400 V  | 53 kA                      |

#### UL/CSA ratings

|   |   |
|---|---|
| <b>full-load current (FLA) for 3-phase AC motor</b>         |   |
| • at 480 V rated value                                      | 32 A  |
| yielded mechanical performance [hp] for 3-phase AC motor    |   |
| • at 200/208 V rated value                                  | 7.5 hp  |
| • at 220/230 V rated value                                  | 10 hp   |
| • at 460/480 V rated value                                  | 20 hp   |
| <b>contact rating of auxiliary contacts according to UL</b> | contacts 21-22, 13-14, 43-44 Q600 / A600, contacts 77-78 R300 / B300, contacts 95-96-98 R300 / D300 |

#### Short-circuit protection

|  |                  |
|--|------------------|
| <b>product function short circuit protection</b>       | Yes              |
| <b>design of short-circuit protection</b>              | electromagnetic  |
| <b>design of the fuse link</b>                         |                  |
| • for short-circuit protection of the auxiliary switch | fuse gL/gG: 10 A |

required

- for short-circuit protection of the signaling switch of the short-circuit release required
- for short-circuit protection of the signaling switch of the overload release required

6A gL/gG/400V

4A gL/gG/400V

### Installation/ mounting/ dimensions

#### mounting position

- recommended

#### fastening method

#### height

#### width

#### depth

any  
vertical, on horizontal standard DIN rail  
screw and snap-on mounting  
170 mm  
90 mm  
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
- for auxiliary and control circuit

screw-type terminals  
screw-type terminals

#### type of connectable conductor cross-sections

- for main contacts
  - solid
  - finely stranded with core end processing
- at AWG cables for main contacts

2x (2.5 ... 6 mm<sup>2</sup>), 1x 10 mm<sup>2</sup>  
2x (2.5 ... 6 mm<sup>2</sup>)  
2x (14 ... 10), 1x 8

#### type of connectable conductor cross-sections

- for auxiliary contacts
  - solid
  - finely stranded with core end processing
- at AWG cables for auxiliary contacts

0.5 ... 4 mm<sup>2</sup>, 2x (0.5 ... 2.5 mm<sup>2</sup>)  
0.5 ... 2.5 mm<sup>2</sup>, 2x (0.5 ... 1.5 mm<sup>2</sup>)  
2x (20 ... 14)

### Safety related data

B10 value with high demand rate according to SN 31920

2 000 000

#### proportion of dangerous failures

- with low demand rate according to SN 31920
- with high demand rate according to SN 31920

40 %  
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 y

#### 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
- IO-Link protocol

No  
No

product function control circuit interface with IO link

No

### Electromagnetic compatibility

#### conducted interference

- due to burst according to IEC 61000-4-4
- due to conductor-earth surge according to IEC 61000-4-5
- due to conductor-conductor surge according to IEC 61000-4-5
- due to high-frequency radiation according to IEC 61000-4-6

4 kV main contacts, 2 kV auxiliary contacts  
4 kV main contacts, 2 kV auxiliary contacts  
2 kV main contacts, 1 kV auxiliary contacts  
0.15-80Mhz at 10V

#### 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



[Confirmation](#)



Functional Safety/Safety of Machinery

Declaration of Conformity

Test Certificates

Marine / Shipping



[Type Test Certificates/Test Report](#)



Marine / Shipping

other

Dangerous Good



[Confirmation](#)

[Transport Information](#)

## 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=3RA6250-1EB32>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA6250-1EB32>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA6250-1EB32>

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

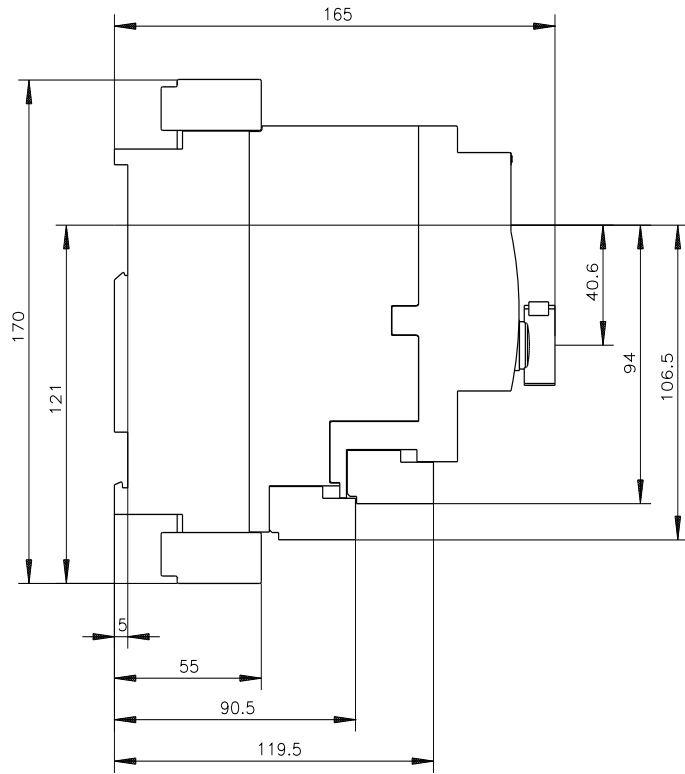
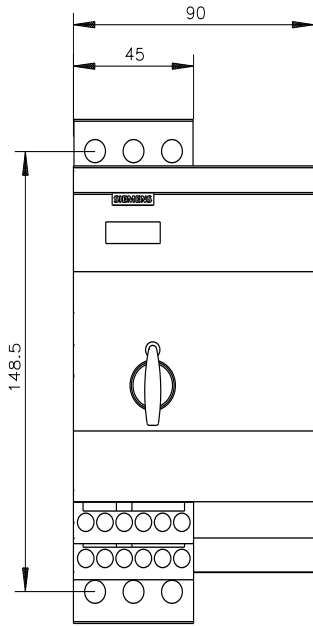
[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA6250-1EB32&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6250-1EB32&lang=en)

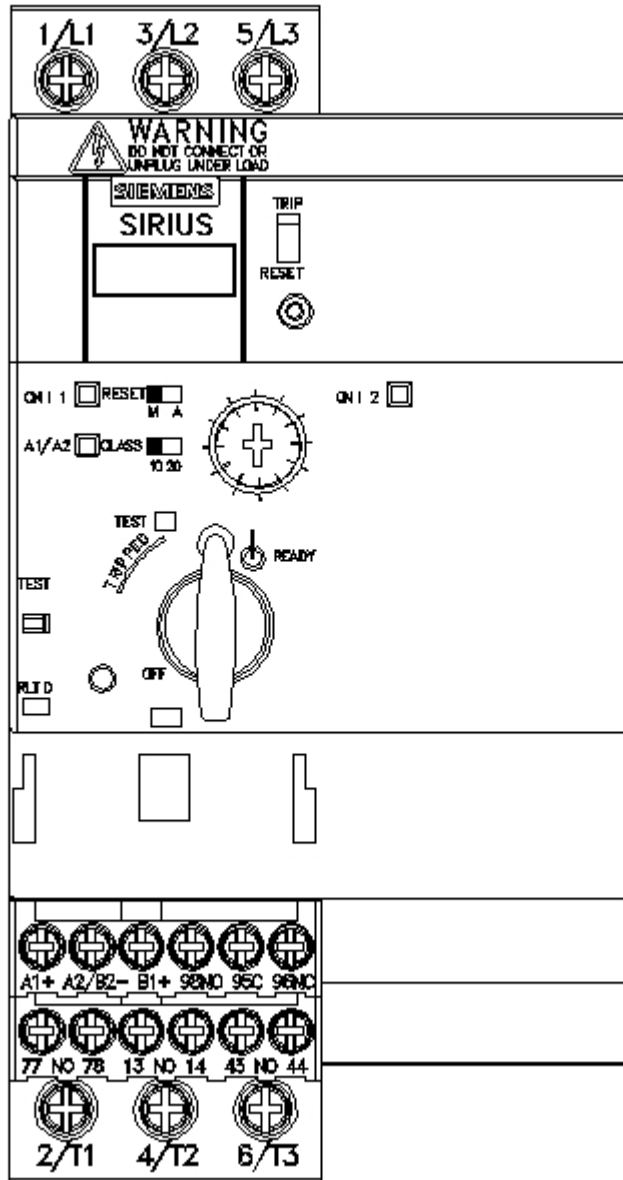
Characteristic: Tripping characteristics, I<sub>t</sub>, Let-through current

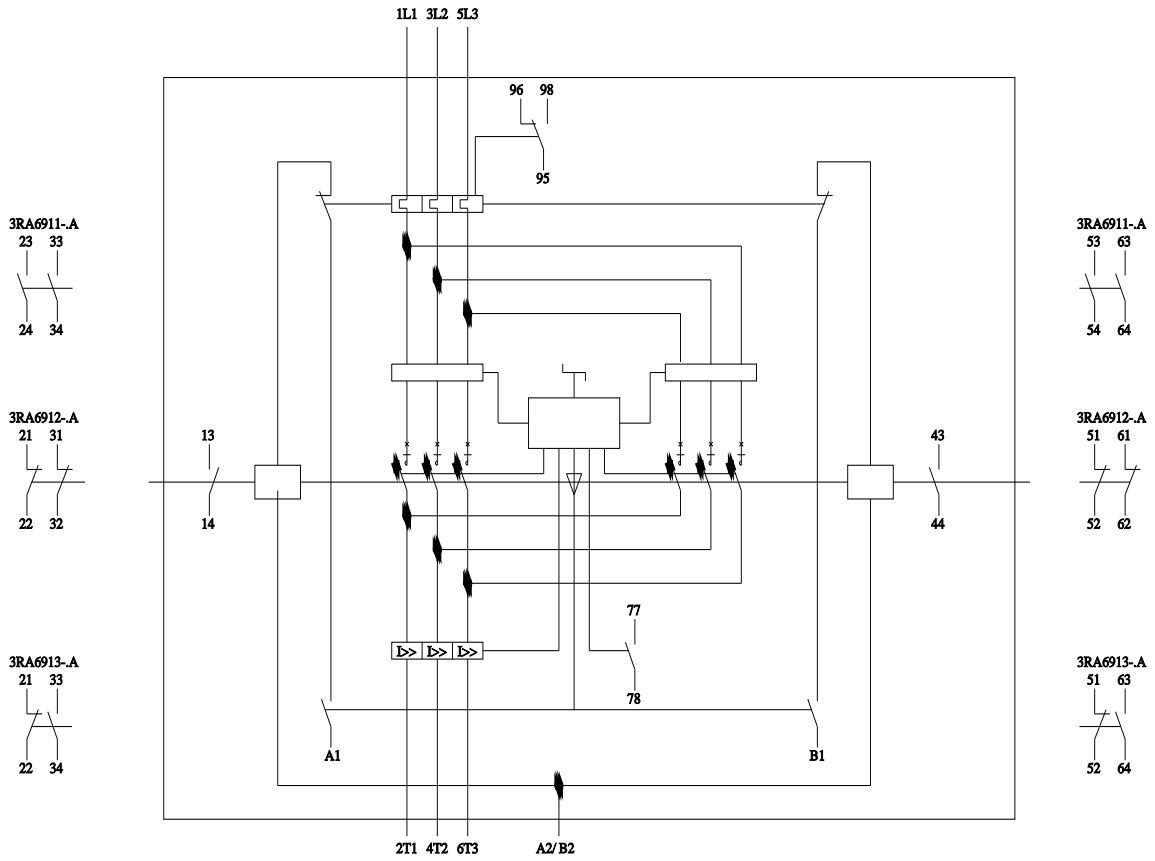
<https://support.industry.siemens.com/cs/ww/en/ps/3RA6250-1EB32/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6250-1EB32&objecttype=14&gridview=view1>







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