## **SIEMENS**

Data sheet 3RA6250-2EB32



SIRIUS Compact load feeder Reversing starter 400 V 24 V AC/DC 50...60 Hz 8...32 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	
<ul> <li>at AC in hot operating state</li> </ul>	5.4 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	1.8 W
without load current share typical	3.5 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	
<ul> <li>between main and auxiliary circuit</li> </ul>	400 V
<ul> <li>between auxiliary and auxiliary circuit</li> </ul>	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 <sup>2</sup> ; 10 cycles
mechanical service life (operating cycles)	
<ul> <li>of the main contacts typical</li> </ul>	10 000 000
<ul> <li>of auxiliary contacts typical</li> </ul>	10 000 000
of the signaling contacts typical	10 000 000
electrical endurance (operating cycles) of auxiliary contacts	
<ul><li>at DC-13 at 6 A at 24 V typical</li></ul>	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
SVHC substance name	Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleititanzirkonoxid - 12626-81-2 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7
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	8 32 A
formula for making capacity limit current	12 x le
formula for limit current breaking capacity	10 x le
yielded mechanical performance for 4-pole AC motor	
at 400 V rated value	15 kW
operating voltage at AC-3 rated value maximum	400 V
operational current	
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
operating power	
at AC-3 at 400 V rated value	15 kW
• at AC-43	
— at 400 V rated value	15 000 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	Noibo
• 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	24 V
1 rated value	50 Hz
• 2 rated value	60 Hz
control supply voltage 1	00112
at DC rated value	24 V
• at DC	24 24 V
holding power	21211
at AC maximum	3.5 W
at DC maximum	3.1 W
Auxiliary circuit	0.1 **
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	1
signaling contacts of the current-dependent overload	1
release for signaling contact	
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 (lcs)	
• at 400 V	53 kA
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
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
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	olocus
for short-circuit protection of the auxiliary switch required	fuse gL/gG: 10 A
for short-circuit protection of the signaling switch of the	6A gL/gG/400V
short-circuit release required	5/1929S/1001
<ul> <li>for short-circuit protection of the signaling switch of the overload release required</li> </ul>	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	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	
• solid	2x (2.5 6 mm²), 1x 10 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	2x (2.5 6 mm²)
finely stranded without core end processing	2x (2.5 6 mm²)
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid	2x (0.25 1.5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.25 1.5 mm²)
finely stranded without core end processing	2x (0.25 1.5 mm²)
for AWG cables for auxiliary contacts	2x (24 16)
Safety related data	
B10 value with high demand rate according to SN 31920	2 000 000
	2 000 000
B10 value with high demand rate according to SN 31920 proportion of dangerous failures	2 000 000
B10 value with high demand rate according to SN 31920	
B10 value with high demand rate according to SN 31920  proportion of dangerous failures  • with low demand rate according to SN 31920	40 %
B10 value with high demand rate according to SN 31920  proportion of dangerous failures  • with low demand rate according to SN 31920  • with high demand rate according to SN 31920	40 % 50 %
B10 value with high demand rate according to SN 31920  proportion of dangerous failures  • with low demand rate according to SN 31920  • with high demand rate according to SN 31920  failure rate [FIT] with low demand rate according to SN 31920  T1 value for proof test interval or service life according to IEC	40 % 50 % 100 FIT
B10 value with high demand rate according to SN 31920  proportion of dangerous failures  • with low demand rate according to SN 31920  • with high demand rate according to SN 31920  failure rate [FIT] with low demand rate according to SN 31920  T1 value for proof test interval or service life according to IEC 61508	40 % 50 % 100 FIT 20 a
B10 value with high demand rate according to SN 31920  proportion of dangerous failures  • with low demand rate according to SN 31920  • with high demand rate according to SN 31920  failure rate [FIT] with low demand rate according to SN 31920  T1 value for proof test interval or service life according to IEC 61508  protection class IP on the front according to IEC 60529	40 % 50 % 100 FIT 20 a
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B10 value with high demand rate according to SN 31920  proportion of dangerous failures  • with low demand rate according to SN 31920  • with high demand rate according to SN 31920  failure rate [FIT] with low demand rate according to SN 31920  T1 value for proof test interval or service life according to IEC 61508  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  Communication/ Protocol  product function bus communication  protocol is supported  • AS-Interface protocol	40 % 50 % 100 FIT 20 a IP20 finger-safe No
B10 value with high demand rate according to SN 31920  proportion of dangerous failures  • with low demand rate according to SN 31920  • with high demand rate according to SN 31920  failure rate [FIT] with low demand rate according to SN 31920  T1 value for proof test interval or service life according to IEC 61508  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  Communication/ Protocol  product function bus communication  protocol is supported  • AS-Interface protocol  • IO-Link protocol	40 % 50 % 100 FIT 20 a IP20 finger-safe  No No
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B10 value with high demand rate according to SN 31920  proportion of dangerous failures  • with low demand rate according to SN 31920  • with high demand rate according to SN 31920  failure rate [FIT] with low demand rate according to SN 31920  T1 value for proof test interval or service life according to IEC 61508  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  Communication/ Protocol  product function bus communication  protocol is supported  • AS-Interface protocol  • IO-Link protocol  product function control circuit interface with IO link  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	40 % 50 % 100 FIT 20 a IP20 finger-safe  No
B10 value with high demand rate according to SN 31920  proportion of dangerous failures  • with low demand rate according to SN 31920  • with high demand rate according to SN 31920  failure rate [FIT] with low demand rate according to SN 31920  T1 value for proof test interval or service life according to IEC 61508  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  Communication/ Protocol  product function bus communication  protocol is supported  • AS-Interface protocol  • IO-Link protocol  product function control circuit interface with IO link  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-	40 % 50 % 100 FIT 20 a IP20 finger-safe  No No No No Vo No No Vo
B10 value with high demand rate according to SN 31920  proportion of dangerous failures  • with low demand rate according to SN 31920  • with high demand rate according to SN 31920  failure rate [FIT] with low demand rate according to SN 31920  T1 value for proof test interval or service life according to IEC 61508  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  Communication/ Protocol  product function bus communication  protocol is supported  • AS-Interface protocol  product function control circuit interface with IO link  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 high-frequency radiation according to IEC 61000-4-6	40 % 50 % 100 FIT 20 a IP20 finger-safe  No No No No Vo No No No No No No No No O 1 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
B10 value with high demand rate according to SN 31920  proportion of dangerous failures  • with low demand rate according to SN 31920  • with high demand rate according to SN 31920  failure rate [FIT] with low demand rate according to SN 31920  T1 value for proof test interval or service life according to IEC 61508  protection class IP on the front according to IEC 60529  touch protection on the front according to IEC 60529  Communication/ Protocol  product function bus communication  protocol is supported  • AS-Interface protocol  • IO-Link protocol  product function control circuit interface with IO link  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  field-based interference according to IEC 61000-4-3	40 % 50 % 100 FIT 20 a IP20 finger-safe  No No No No No No No O 100 FIT 20 a IP20 finger-safe

Supply voltage	
Supply voltage required Auxiliary voltage	No
Display	
number of LEDs	3
Cortificator/ approvals	

Certificates/ approvals

**General Product Approval** 

**EMC** 

Functional Safety/Safety of Machinery



Confirmation









**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping





Type Test Certificates/Test Report







Marine / Shipping

other

**Dangerous Good** 





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=3RA6250-2EB32

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RA6250-2EB32}$ 

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA6250-2EB32

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

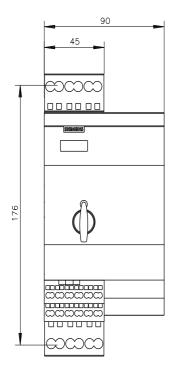
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA6250-2EB32&lang=en

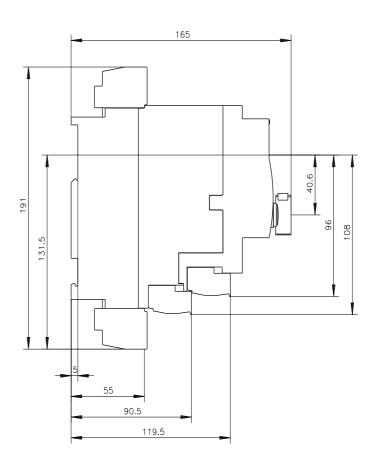
Characteristic: Tripping characteristics, I²t, Let-through current

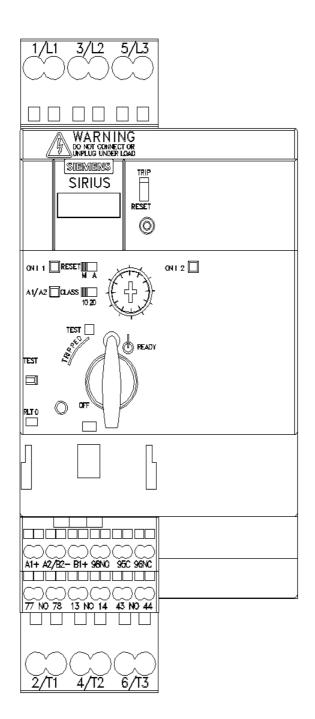
https://support.industry.siemens.com/cs/ww/en/ps/3RA6250-2EB32/char

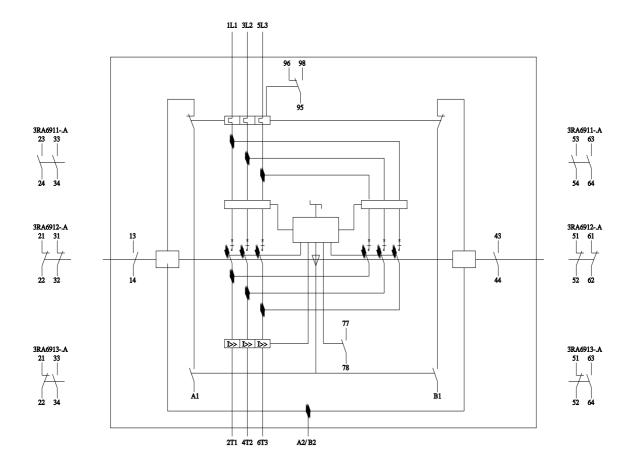
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6250-2EB32&objecttype=14&gridview=view1









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