## **SIEMENS**

Data sheet 3RA6250-0CB30



SIRIUS Compact load feeder Reversing starter 690 V 24 V AC/DC 50...60 Hz 1...4 A IP20 Connection main circuit: plug-in, without terminals Connection control circuit: plug-in, without terminals

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>	1 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	0.33 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	
<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
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	
• 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
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	1 4 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	1.5 kW
• at 500 V rated value	2.2 kW
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-3 at 400 V rated value	4 A
• at AC-43	
— at 400 V rated value	3.6 A
— at 500 V rated value	3.9 A
— at 690 V rated value	3.8 A
operating power	
at AC-3 at 400 V rated value	1.5 kW
• at AC-43	
— 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	0 000 mi
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	200 1111
type of voltage	AC/DC
control supply voltage 1 at AC	AODC
at 50 Hz rated value	24 V
• at 50 Hz	24 ··· 24 V
at 60 Hz rated value	24 V. 24 V
• at 60 Hz	24 V
control supply voltage frequency	24 V
• 1 rated value	50 Hz
• 2 rated value	60 Hz
	00 NZ
control supply voltage 1  • at DC rated value	24 V
• at DC	24 24 V
holding power	2.0 W
at AC maximum     at DC maximum	2.8 W
at DC maximum  Auxilians circuit	2.9 W
Auxiliary circuit	0
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 (lcs)	
• at 400 V	53 kA
• at 500 V rated value	3 kA
	0.1-4
at 690 V rated value	3 kA
at 690 V rated value  UL/CSA ratings	3 KA

<ul> <li>at 480 V rated value</li> </ul>	4 A
at 600 V rated value	4 A
yielded mechanical performance [hp] for 3-phase AC motor	
<ul><li>at 200/208 V rated value</li></ul>	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	
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gL/gG: 10 A
<ul> <li>for short-circuit protection of the signaling switch of the short-circuit release required</li> </ul>	6A gL/gG/400V
<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	170 mm
width	90 mm
depth	165 mm
Connections/ Terminals	
product component removable terminal for main circuit	Yes
product component removable terminal for main circuit product component removable terminal for auxiliary and	Yes
control circuit	165
type of electrical connection	
for main current circuit	plug-in without terminals
for auxiliary and control circuit	plug-in without terminals
Safety related data	
proportion of dangerous failures	
<ul> <li>with low demand rate according to SN 31920</li> </ul>	40 %
<ul> <li>with high demand rate according to SN 31920</li> </ul>	50 %
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
P40 value with high demand rate asserting to CN 24000	3 000 000
B10 value with high demand rate according to SN 31920	3 000 000
T1 value for proof test interval or service life according to IEC 61508	20 a
T1 value for proof test interval or service life according to	
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T1 value for proof test interval or service life according to IEC 61508 protection class IP on the front according to IEC 60529	20 a IP20
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	20 a IP20
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	20 a  IP20 finger-safe
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	20 a  IP20 finger-safe
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	20 a  IP20 finger-safe  No No
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	20 a  IP20 finger-safe  No No
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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	20 a  IP20 finger-safe  No No
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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	IP20 finger-safe  No No No No No A kV main contacts, 2 kV auxiliary contacts 4 kV main contacts, 2 kV auxiliary contacts
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 conductor-conductor surge according to IEC 61000-4-5	IP20 finger-safe  No No No No No A kV main contacts, 2 kV auxiliary contacts 4 kV main contacts, 2 kV auxiliary contacts 2 kV main contacts, 1 kV auxiliary contacts
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	20 a  IP20 finger-safe  No  No  No  No  A kV main contacts, 2 kV auxiliary contacts 4 kV main contacts, 2 kV auxiliary contacts
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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	IP20 finger-safe  No No No No No A 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
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 61000-4-6  • due to high-frequency radiation according to IEC 61000-4-6  field-based interference according to IEC 61000-4-3	IP20 finger-safe  No  No  No  No  No  A 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
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  electrostatic discharge according to IEC 61000-4-2  conducted HF interference emissions according to	IP20 finger-safe  No  No  No  No  No  A 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  10 V/m 8 kV
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  electrostatic discharge according to IEC 61000-4-2  conducted HF interference emissions according to CISPR11	IP20 finger-safe  No  No  No  No  No  A 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  10 V/m 8 kV 150 kHz 30 MHz Class A

Supply voltage required Auxiliary voltage	No
Display	
number of LEDs	3

Approvals Certificates

**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=3RA6250-0CB30

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA6250-0CB30

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA6250-0CB30

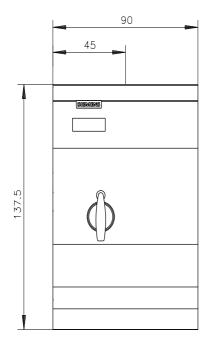
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA6250-0CB30&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA6250-0CB30&lang=en</a>

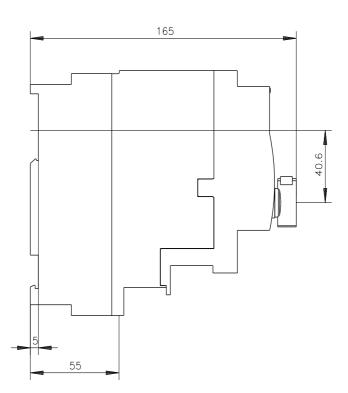
Characteristic: Tripping characteristics, I2t, Let-through current

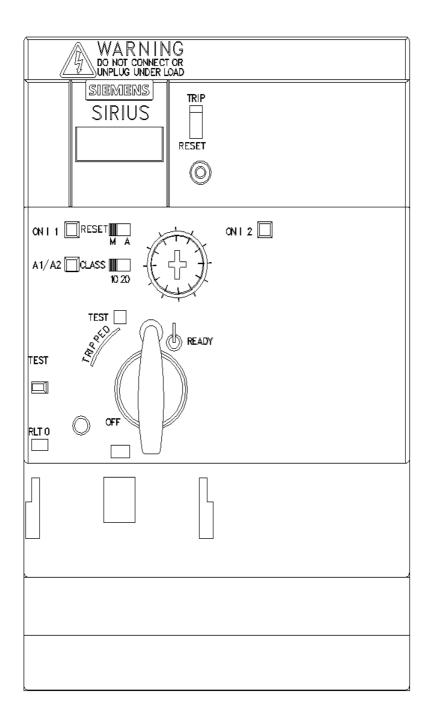
https://support.industry.siemens.com/cs/ww/en/ps/3RA6250-0CB30/char

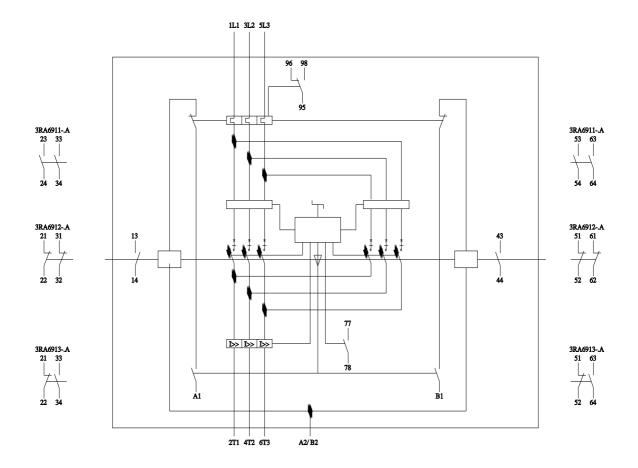
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6250-0CB30&objecttype=14&gridview=view1









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