SIEMENS

Data sheet 3RA6250-1CP32



SIRIUS Compact load feeder Reversing starter 690 V 110...240 V AC/DC 50...60 Hz 1...4 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
power loss [W] for rated value of the current	
 at AC in hot operating state 	1 W
 at AC in hot operating state per pole 	0.33 W
without load current share typical	6 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
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
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 1/11
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	250 1/11
type of voltage	AC/DC
control supply voltage 1 at AC	AODC
at 50 Hz rated value	240 V
• at 50 Hz • at 60 Hz	110 240 V 110 240 V
*****	110 240 V
control supply voltage frequency	50 Hz
1 rated value2 rated value	
	60 Hz
control supply voltage 1	240.1/
at DC rated value	240 V
• at DC	110 240 V
holding power	6 M
• at AC maximum	6 W 5.1 W
at DC maximum Auxilians circuit	3.1 VV
Auxiliary circuit	
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for	2
signaling contact	
number of CO contacts of the current-dependent overload	1
number of CO contacts of the current-dependent overload release for signaling contact	
number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum	10 A
number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V	
number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions	10 A 0.27 A
number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class	10 A
number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics)	10 A 0.27 A CLASS 10 and 20 adjustable
number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V	10 A 0.27 A CLASS 10 and 20 adjustable 53 kA
number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V • at 500 V rated value	10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA
number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V • at 500 V rated value • at 690 V rated value	10 A 0.27 A CLASS 10 and 20 adjustable 53 kA
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number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V • at 500 V rated value • at 690 V rated value	10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA

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	4A gL/gG/400V
overload release required	
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	Yes
control circuit	
type of electrical connection	
for main current circuit	screw-type terminals
for auxiliary and control circuit	screw-type 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	
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
B10 value with high demand rate according to SN 31920	3 000 000
T1 value for proof test interval or service life according to	20 a
IEC 61508	200
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	2 kV main contacts, 1 kV auxiliary contacts

 due to high-frequency radiation according to IEC 61000- 4-6 	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
Approvals Certificates	

General Product Approval

EMC

Functional Safety/Safety of Ma-chinery

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=3RA6250-1CP32

Cax online generator

automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA6250-1CP32

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA6250-1CP3

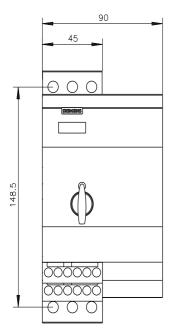
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

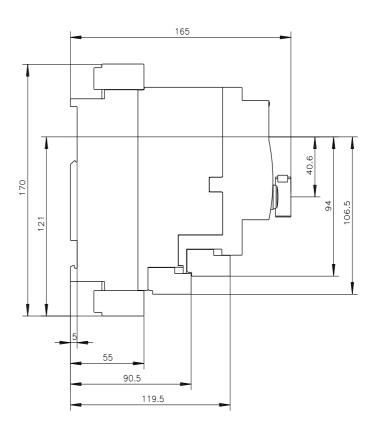
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6250-1CP32&lang=en

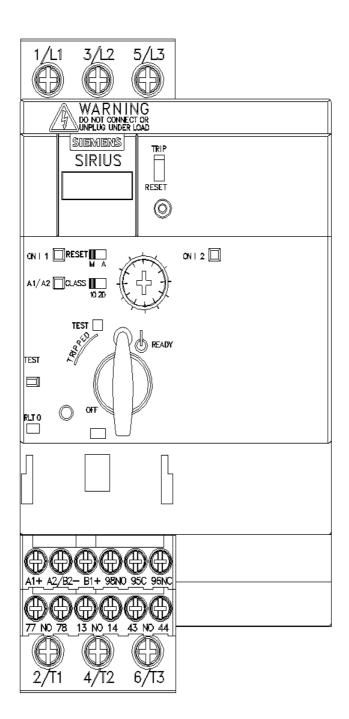
Characteristic: Tripping characteristics, I2t, Let-through current

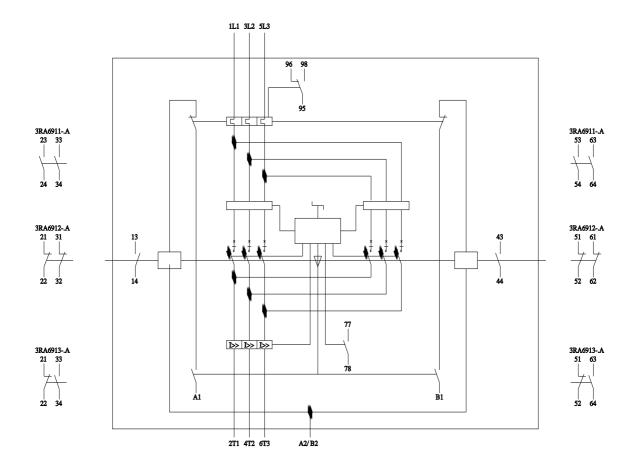
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6250-1CP32&objecttype=14&gridview=view1









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