SIEMENS

Data sheet

3RA6250-2CB33



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: Spring-type terminal

product brand name	SIRIUS
product designation	compact starter
design of the product	reversing starter
product type designation	3RA62
Seneral 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 	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	
 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 %

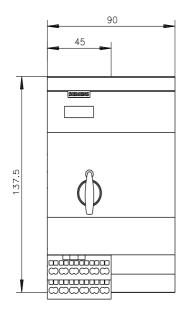
Main circuit				
number of poles for main current circuit	3			
adjustable current response value current of the current- dependent overload release	1 4 A			
formula for making capacity limit current	12 x le			
formula for limit current breaking capacity	10 x le			
yielded mechanical performance for 4-pole 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				
• 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				
• 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	50 Hz			
1 rated value 2 rated value	50 Hz 60 Hz			
• 2 rated value control supply voltage 1	00112			
at DC rated value	24 V			
at DC rated value at DC	24 V 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 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			
• at 690 V rated value	3 kA			
UL/CSA ratings				
full-load current (FLA) for 3-phase AC motor				

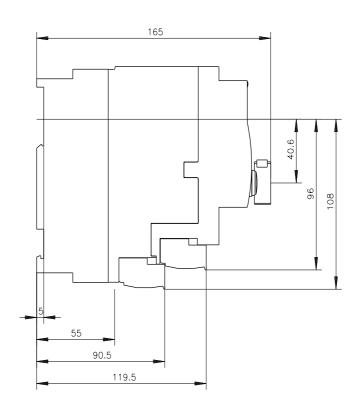
at 480 V rated value	4 A
at 400 V rated value	4 A
yielded mechanical performance [hp] for 3-phase AC motor	
at 200/208 V rated value	0.75 hp
• at 220/230 V rated value	0.75 hp
• at 460/480 V rated value	2 hp
• at 575/600 V rated value	3 hp
contact rating of auxiliary contacts according to UL	contacts 21-22, 13-14, 43-44 Q600 / A600, contacts 77-78 R300 / B300,
	contacts 95-96-98 R300 / D300
Short-circuit protection	Y.
product function short circuit protection	Yes
design of short-circuit protection	electromagnetic
design of the fuse link	free at (a Q) 40 A
 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 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 	plug-in without terminals
for auxiliary and control circuit	spring-loaded 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)
 finely stranded without core end processing 	2x (1.5 6 mm²)
type of connectable conductor cross-sections	
 for auxiliary contacts 	
— 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 	2x (0.25 1.5 mm²)
 for AWG cables for auxiliary contacts 	2x (24 16)
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 IEC 61508	20 a
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

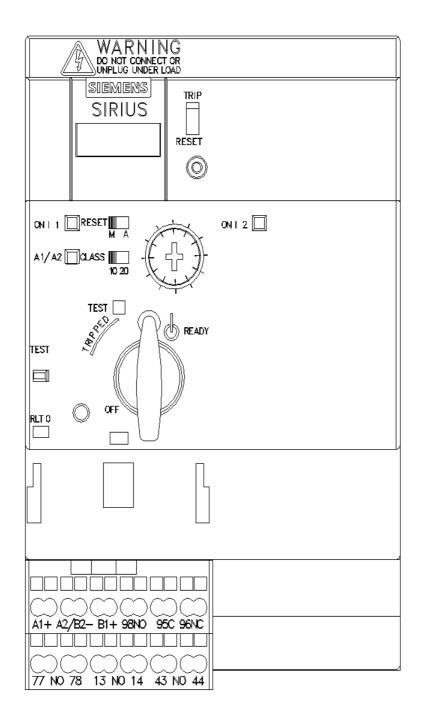
• due to conductor-earth surge according to IEC 61000-4-5		IEC 61000-4-5 4	4 kV main contacts, 2 kV auxiliary contacts			
 due to conductor-conductor surge according to IEC 61000-4-5 		ng to IEC 2	2 kV main contacts, 1 kV auxiliary contacts			
 due to high-frequency radiation according to IEC 61000- 4-6 		to IEC 61000- 0	0.15-80Mhz at 10V			
field-based interference according to IEC 61000-4-3		0 0-4-3 1	0 V/m			
electrostatic discharge according to IEC 61000-4-2		0-4-2 8	8 kV			
conducted HF interference emissions according to CISPR11		ng to 1	150 kHz 30 MHz Class A			
field-bound HF interference emission according to CISPR11		ng to CISPR11 3	30 1000 MHz Class A			
Supply voltage						
Supply voltage requir	ed Auxiliary voltage	Ν	lo			
Display						
number of LEDs	·	3				
Approvals Certificates						
General Product App	roval					
ccc	UK CA	EG-Konf.			EHL	
EMC	Functional Safety/Safety of Ma- chinery	Test Certificates	Marine / Shipping			
RCM	VDE	<u>Type Test Certific</u> ates/Test Report	ABS		Lloyd's Register uts	
Marine / Shipping	other	Dangerous Good				
PRS	<u>Confirmation</u>	<u>Transport Informati</u>	<u>n</u>			
Further information						

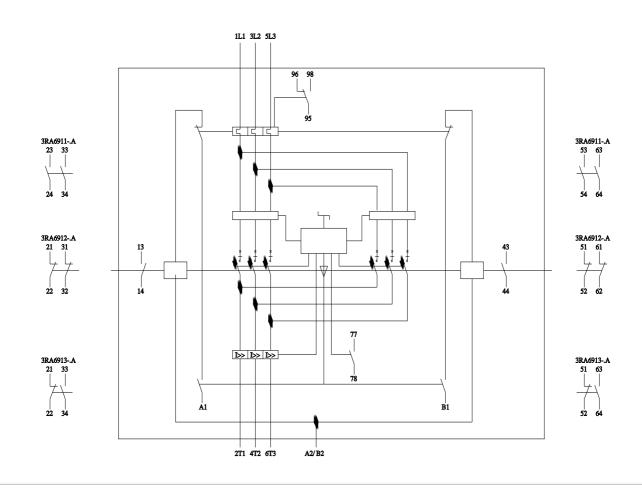
Further information

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=3RA6250-2CB33 Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA6250-2CB33 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RA6250-2CB3 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6250-2CB33&lang=en Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RA6 -2CB33/char Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6250-2CB33&objecttype=14&gridview=view1









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