SIEMENS

Data sheet 3RA6250-2BB33



SIRIUS Compact load feeder Reversing starter 690 V 24 V AC/DC 50...60 Hz 0.32...1.25 A IP20 Connection main circuit: plug-in, without terminals Connection control circuit: Spring-type terminal

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 0.1 W at AC in hot operating state per pole 0.03 W without load current share typical 2.9 W insulation voltage rated value 690 V degree of pollution 3
design of the product product type designation 3RA62 General technical data product function control circuit interface to parallel wiring product extension auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state • at AC in hot operating state per pole • without load current share typical insulation voltage rated value 690 V degree of pollution reversing starter 780 3RA62
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product function control circuit interface to parallel wiring product extension auxiliary switch Power loss [W] for rated value of the current at AC in hot operating state at AC in hot operating state per pole at AC in hot operating state per pole without load current share typical insulation voltage rated value degree of pollution Yes 0.1 W 0.2 W 0.3 W 0.9 W 0.9 W 0.9 W
product extension auxiliary switch power loss [W] for rated value of the current at AC in hot operating state at AC in hot operating state per pole at AC in hot operating state per pole without load current share typical insulation voltage rated value 690 V degree of pollution 3
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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	0.32 1.25 A
formula for making capacity limit current	38.4 x le
formula for limit current breaking capacity	32 x le
yielded mechanical performance for 4-pole AC motor	
at 400 V rated value	0.37 kW
• at 500 V rated value	0.55 kW
at 690 V rated value	0.75 kW
operating voltage at AC-3 rated value maximum	690 V
operational current	
at AC at 400 V rated value	1.25 A
 at AC-3 at 400 V rated value 	1.25 A
• at AC-43	
— at 400 V rated value	1.1 A
— at 500 V rated value	1.2 A
— at 690 V rated value	1.1 A
operating power	
at AC-3 at 400 V rated value	0.37 kW
• at AC-43	
— at 400 V rated value	370 W
— at 500 V rated value	550 W
— at 690 V rated value	750 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	200 1111
type of voltage	AC/DC
control supply voltage 1 at AC	AGIDO
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	Z4 V
• 1 rated value	50 Hz
• 2 rated value	60 Hz
control supply voltage 1	00 FIZ
at DC rated value	24 V
at DC rated value at DC	24 ··· 24 V
	۲٦ ۲۶ ۷
holding power ● at AC maximum	2.8 W
at AC maximum at DC maximum	2.8 W
Auxiliary circuit	2.0 11
number of NC contacts for auxiliary contacts	0
number of NC contacts for auxiliary contacts 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 contact	
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	

-1 400 V1	4.05 A		
• at 480 V rated value	1.25 A		
• at 600 V rated value	1.25 A		
yielded mechanical performance [hp] for 3-phase AC motor	0.51		
• at 460/480 V rated value	0.5 hp		
• at 575/600 V rated value	0.5 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 	6A gL/gG/400V		
short-circuit release required			
 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	Yes		
control circuit	163		
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	100 FIT		
31920	2 000 000		
B10 value with high demand rate according to SN 31920	3 000 000 20 a		
T1 value for proof test interval or service life according to IEC 61508	20 0		
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		
•			

61000-4-5				
 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=3RA6250-2BB33

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA6250-2BB33

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA6250-2BB33

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

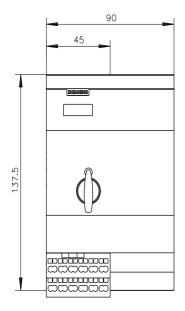
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6250-2BB33\&lang=en}}$

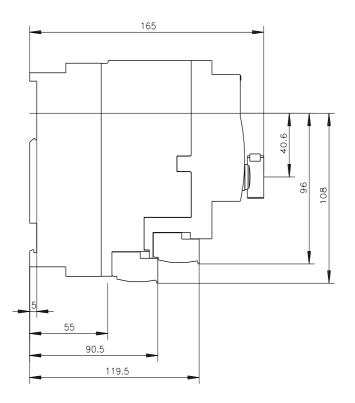
Characteristic: Tripping characteristics, I^2t , Let-through current

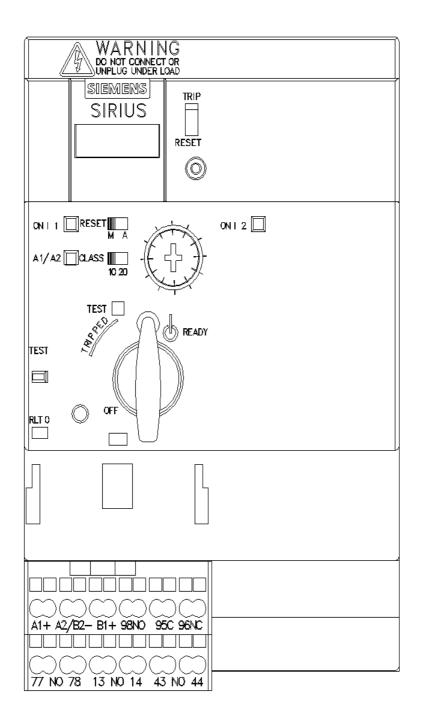
https://support.industry.siemens.com/cs/ww/en/ps/3RA6250-2BB33/char

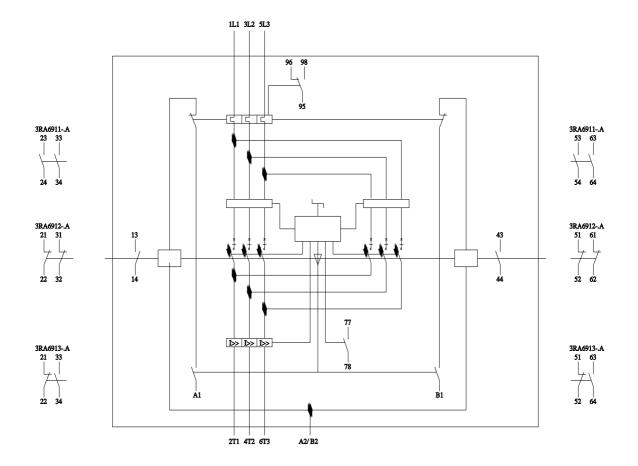
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6250-2BB33&objecttype=14&gridview=view1









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