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
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 	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
vibration resistance	f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s ² ; 10 cycles
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	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2
Weight	2.452 kg
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-	1 4 A
dependent overload release	
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	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
control supply voltage 1 at DC rated value	24 V
control supply voltage 1 at DC	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 (Ics)	
	53 kA
at 400 V rated value	33 KA
at 400 V rated valueat 500 V rated value	3 kA
• at 500 V rated value	3 kA
at 500 V rated valueat 690 V rated value	3 kA

-t-400 \ /td-v-l-v-	
at 480 V rated value at 600 V rated value	4 A
at 600 V rated value Violded machanical performance [hp] for 3 phase AC mater.	4 A
yielded mechanical performance [hp] for 3-phase AC motor	0.75 hp
• at 200/208 V rated value	0.75 hp
• at 220/230 V rated value	0.75 hp
at 460/480 V rated value t 575/600 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 overload release required	4A gL/gG/400V
Installation/ mounting/ dimensions	
mounting position	any
mounting position 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 %
B10 value with high demand rate according to SN 31920	3 000 000
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
IEC 61508	
T1 value for proof test interval or service life according to IEC	20 a
61508	
Electrical Safety	
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 61000-4-5 	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	







Confirmation





EMV **Test Certificates** Marine / Shipping **Functional Saftey** other **Dangerous goods**





Type Test Certificates/Test Report



Confirmation

Transport Information

Environment

Environmental Confirmations

Information on the packaging

om/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

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

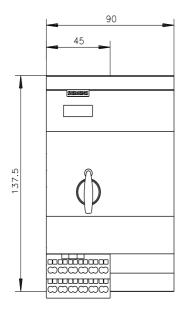
https://support.industry.siemens.com/cs/ww/en/ps/3RA6250-2CB

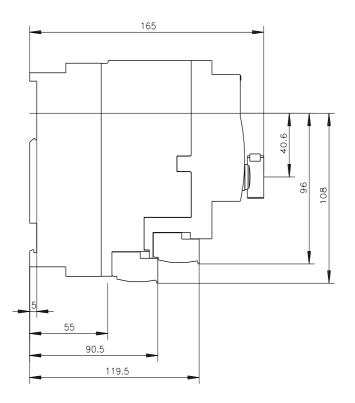
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

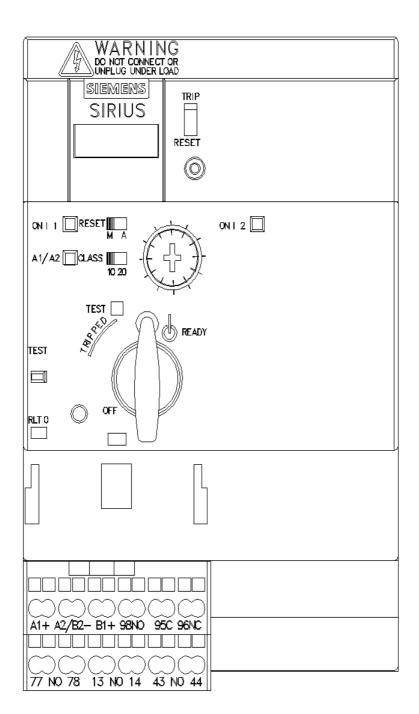
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6250-2CB33&lang=en

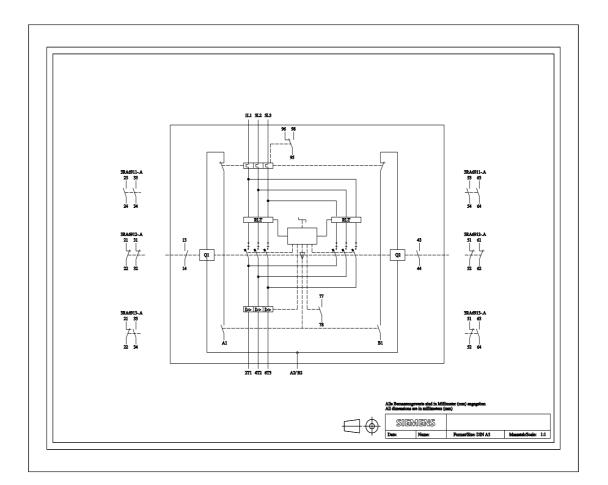
Characteristic: Tripping characteristics, I2t, Let-through current

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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