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/s²; 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
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 %
Aain circuit	
number of poles for main current circuit	3

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adjustable current response value current of the current- dependent overload release	1 4 A
•	12 x le
formula for making capacity limit current	
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
• 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 (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 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 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			
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			
B10 value with high demand rate according to SN 31920	3 000 000		
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		
T1 value for proof test interval or service life according to EC	20 a		
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	4 k// main contacts 2 k// auviliany contacts		
conducted interference • due to burst according to IEC 61000-4-4	4 kV main contacts, 2 kV auxiliary contacts		
conducted interference	4 kV main contacts, 2 kV auxiliary contacts 4 kV main contacts, 2 kV auxiliary contacts 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 a	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		
Certificates/ approvals					
General Product Approv	val			EMC	Functional Safety/Safety of Ma- chinery
	<u>Confirmation</u>	(U) u	EHC	RCM	VDE
Declaration of Conform	ity	Test Certificate	s Marine / Shipping		
UK CA	CE EG-Konf.	<u>Type Test Cert</u> <u>ates/Test Rep</u>	ific- ort		Lloyd's Register urs
Marine / Shipping		other	Dangerous Good		
		Confirmatior	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=3RA6250-2CB33

Cax online generator

.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA6250-2CB33 http://supp

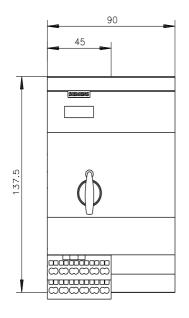
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RA6250-2CB3

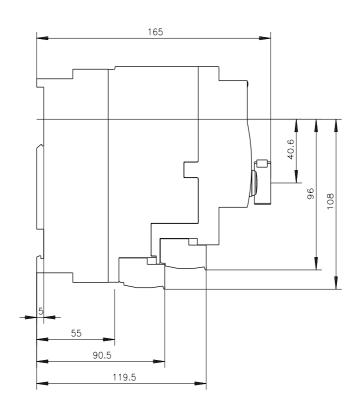
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6250-2CB33&lang=en

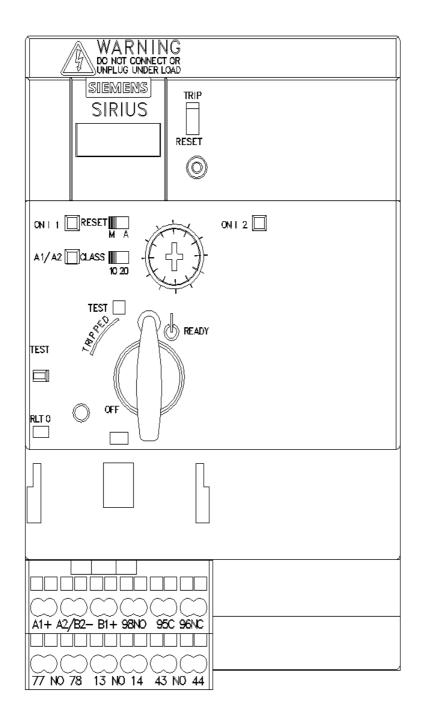
Characteristic: Tripping characteristics, I²t, Let-through current https://sup

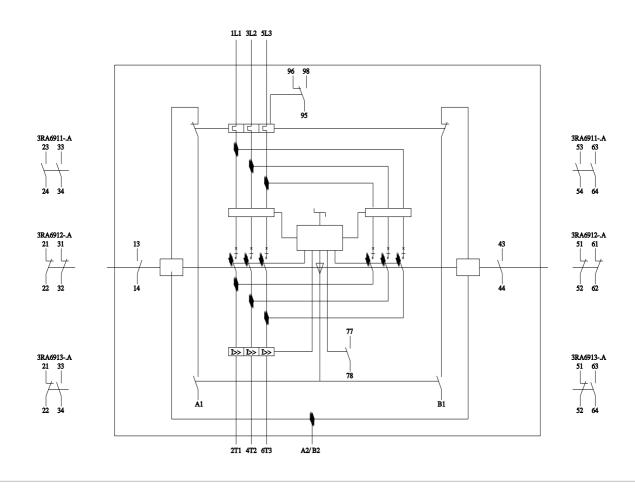
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6250-2CB33&objecttype=14&gridview=view1









last modified:

11/21/2022 🖸