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 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 	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
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 %
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	
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 (Ics)	
• 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	1.25 A
• at 600 V rated value	1.25 A

yielded mechanical performance [hp] for 3-phase AC motor					
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 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					
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 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	(k) main contracto 2 k) auvilians contracto				
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 MH	Hz Class A			
Supply voltage							
Supply voltage required Auxiliary voltage			No				
Display							
number of LEDs	·		3				
Certificates/ approvals							
General Product Approva	I				EMC	Functional Safety/Safety of Ma- chinery	
<u>Confirmation</u>			I	EAC	RCM	DE	
Declaration of Conformity	1	Test Certificates	s Marin	e / Shipping			
UK CA	CE EG-Konf.	<u>Type Test Certi</u> ates/Test Repo		ABS		Lloyds Register urs	
Marine / Shipping		other	Dange	erous Good			
PRS	RINA	<u>Confirmation</u>	<u>Trans</u>	oort Information			
Further information Siemens has decided to ea https://press.siemens.com/g			wn-russian-busi	ness			

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, ...)

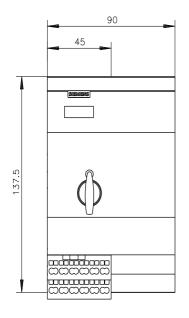
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6250-2BB33&lang=en

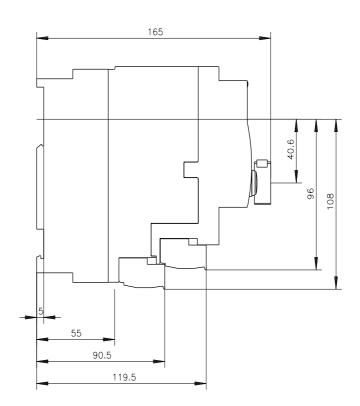
Characteristic: Tripping characteristics, I2t, Let-through current

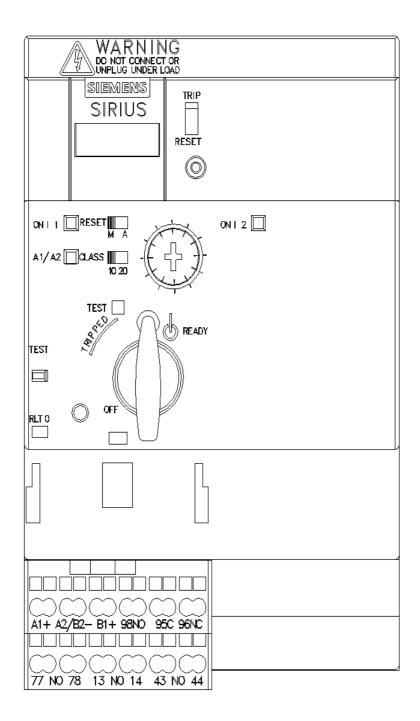
https://support.industry.siemens.com/cs/ww/en/ps/3RA6250-2BB33/char

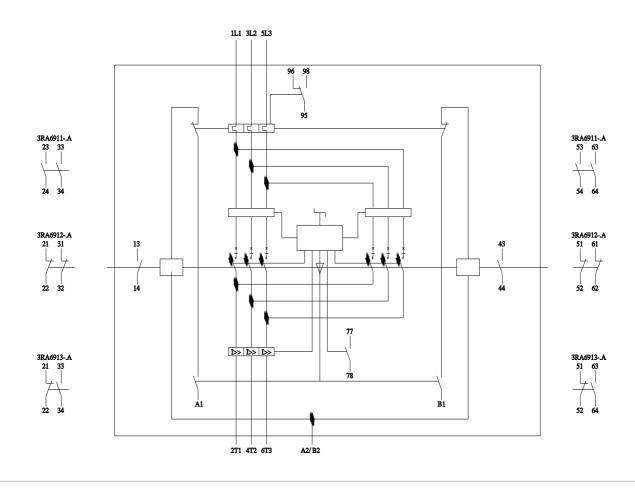
Further characteristics (e.g. electrical endurance, switching frequency)

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









last modified:

11/21/2022 🖸