SIEMENS

Data sheet 3RA6250-1BB32



SIRIUS Compact load feeder Reversing starter 690 V 24 V AC/DC 50...60 Hz 0.32...1.25 A IP20 Connection main circuit: Screw terminal Connection control circuit: screw 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
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2
Weight	2.537 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- 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	3 000 I/II
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 1/11
type of voltage	AC/DC
control supply voltage 1 at AC	AOIDC
• 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	24 V
• 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	21217
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	
at 400 V rated valueat 500 V rated value	3 kA
	3 kA 3 kA
• at 500 V rated value	
at 500 V rated valueat 690 V rated value	

• 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 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	170 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	screw-type terminals	
 for auxiliary and control circuit 	screw-type 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)	
type of connectable conductor cross-sections		
for auxiliary contacts		
— solid	0.5 4 mm², 2x (0.5 2.5 mm²)	
finely stranded with core end processing	0.5 2.5 mm², 2x (0.5 1.5 mm²)	
for AWG cables for auxiliary contacts	2x (20 14)	
Safety related data	ZA (20 17)	
proportion of dangerous failures		
with low demand rate according to SN 31920	40 %	
with ligh demand rate according to SN 31920 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	2 kV main contacts, 1 kV auxiliary contacts	
 due to burst according to IEC 61000-4-4 due to conductor-earth surge according to IEC 61000-4-5 	4 kV main contacts, 2 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	







Confirmation





EMV

Functional Saftey

Test Certificates

Marine / Shipping

other

Dangerous goods





Type Test Certificates/Test Report



Confirmation

Transport Information

Environment

Environmental Confirmations

Further information

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=3RA6250-1BB32

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RA6250-1BB32}$

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RA6250-1BB32

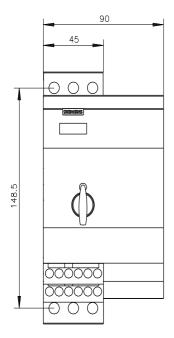
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

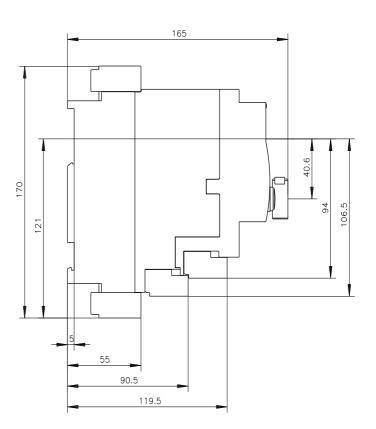
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6250-1BB32&lang=en

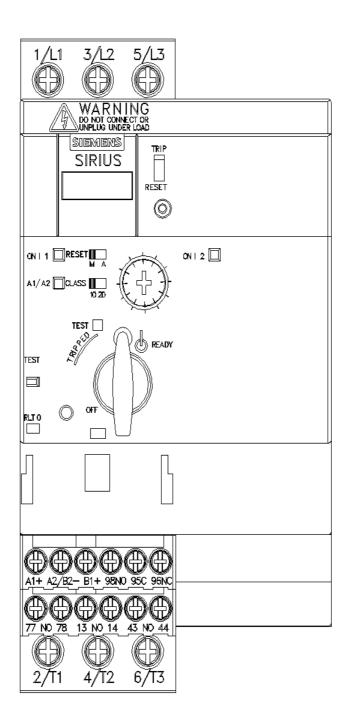
Characteristic: Tripping characteristics, I2t, Let-through current

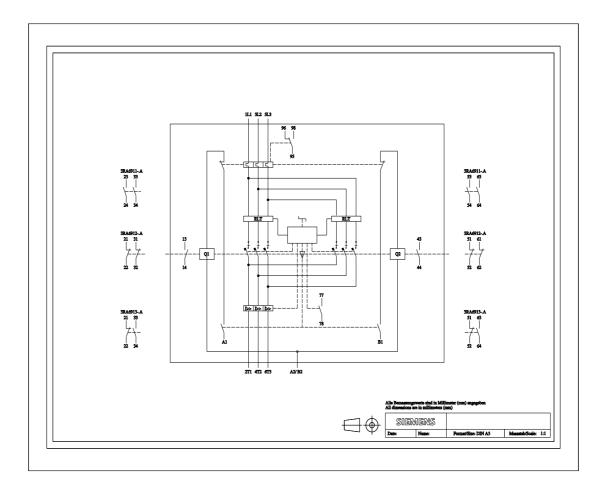
https://support.industry.siemens.com/cs/ww/en/ps/3RA6250-1BB32/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6250-1BB32&objecttype=14&gridview=view1









last modified: 3/11/2024 🖸