## SIEMENS

## Data sheet

## 3RA6250-2AB33



SIRIUS Compact load feeder Reversing starter 690 V 24 V AC/DC 50...60 Hz 0.1...0.4 A IP20 Connection main circuit: plug-in, without terminals Connection control circuit: Spring-type terminal

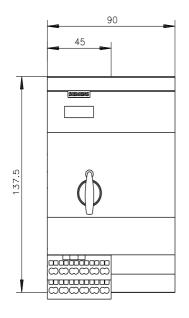
the second section data	
product brand name	SIRIUS
product designation	compact starter
design of the product	reversing starter
product type designation	3RA62
General technical data	
product function control circuit interface to parallel wiring	Yes
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	0.01 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	0.01 W
<ul> <li>without load current share typical</li> </ul>	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	
<ul> <li>between main and auxiliary circuit</li> </ul>	400 V
<ul> <li>between auxiliary and auxiliary circuit</li> </ul>	250 V
<ul> <li>between control and auxiliary circuit</li> </ul>	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)	
<ul> <li>of the main contacts typical</li> </ul>	10 000 000
<ul> <li>of auxiliary contacts typical</li> </ul>	10 000 000
<ul> <li>of the signaling contacts typical</li> </ul>	10 000 000
electrical endurance (operating cycles) of auxiliary contacts	
<ul> <li>at DC-13 at 6 A at 24 V typical</li> </ul>	30 000
<ul> <li>at AC-15 at 6 A at 230 V typical</li> </ul>	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	2.475 kg
mbient 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

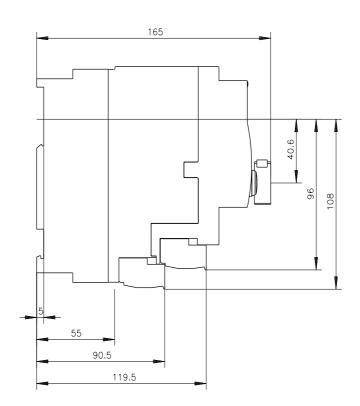
relative humidity during operation	10 90 %
Main circuit	
number of poles for main current circuit	3
adjustable current response value current of the current- dependent overload release	0.1 0.4 A
formula for making capacity limit current	120 x le
formula for limit current breaking capacity	100 x le
yielded mechanical performance for 4-pole AC motor	
<ul> <li>at 400 V rated value</li> </ul>	0.09 kW
<ul> <li>at 500 V rated value</li> </ul>	0.12 kW
• at 690 V rated value	0.18 kW
operating voltage at AC-3 rated value maximum	690 V
operational current	
<ul> <li>at AC at 400 V rated value</li> </ul>	0.4 A
• at AC-3 at 400 V rated value	0.4 A
• at AC-43	
— at 400 V rated value	0.3 A
— at 500 V rated value	0.32 A
— at 690 V rated value	0.35 A
operating power	
• at AC-3 at 400 V rated value	0.09 kW
• at AC-43	
— at 400 V rated value	90 W
— at 500 V rated value	120 W
— at 690 V rated value	180 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 v 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	1
signaling contact	
	1
signaling contact number of CO contacts of the current-dependent overload	
signaling contact number of CO contacts of the current-dependent overload release for signaling contact	1
signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum	1 10 A
signaling contact number of CO contacts of the current-dependent overload release for signaling contact <b>operational current of auxiliary contacts at AC-12 maximum</b> operational current of auxiliary contacts at DC-13 at 250 V	1 10 A 0.27 A
signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class	1 10 A
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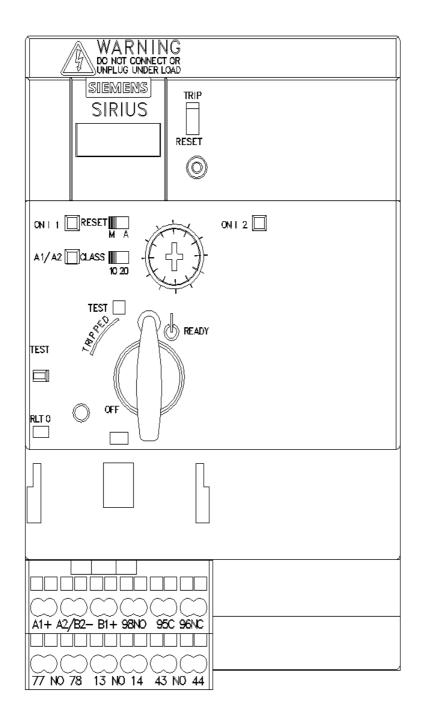
• at 480 V rated value	0.4 A
at 600 V rated value	0.4 A
contact rating of auxiliary contacts according to UL	contacts 21-22, 13-14, 43-44 Q600 / A600, contacts 77-78 R300 / B300, contacts 95-96-98 R300 / D300
Short-circuit protection	
product function short circuit protection	Yes
design of short-circuit protection	electromagnetic
design of the fuse link	
<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gL/gG: 10 A
<ul> <li>for short-circuit protection of the signaling switch of the</li> </ul>	6A gL/gG/400V
<ul><li>short-circuit release required</li><li>for short-circuit protection of the signaling switch of the</li></ul>	4A gL/gG/400V
overload release required	
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	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 mm <sup>2</sup> ), 1x 10 mm <sup>2</sup>
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1.5 6 mm²)
<ul> <li>finely stranded without core end processing</li> </ul>	2x (1.5 6 mm²)
type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
— solid	2x (0.25 1.5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.25 1.5 mm²)
<ul> <li>finely stranded without core end processing</li> </ul>	2x (0.25 1.5 mm²)
<ul> <li>for AWG cables for auxiliary contacts</li> </ul>	2x (24 16)
Safety related data	
proportion of dangerous failures	
<ul> <li>with low demand rate according to SN 31920</li> </ul>	40 %
<ul> <li>with high demand rate according to SN 31920</li> </ul>	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 61508	20 a
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 Electromagnetic compatibility	No
conducted interference	
<ul> <li>due to burst according to IEC 61000-4-4</li> </ul>	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
<ul> <li>due to conductor-conductor surge according to IEC</li> </ul>	2 kV main contacts, 1 kV auxiliary contacts
61000-4-5	

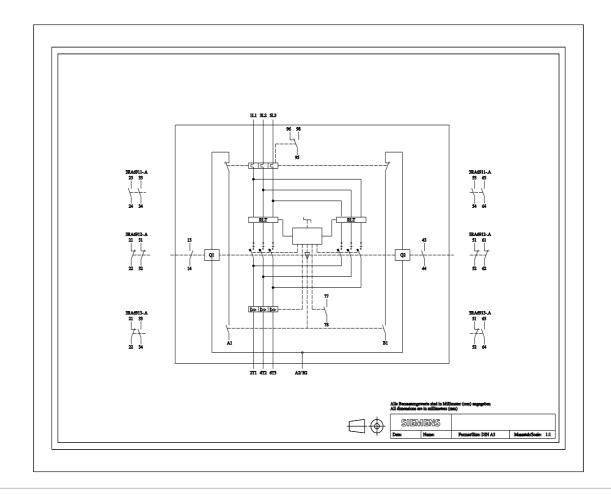
<ul> <li>due to high-frequency radiation according to IEC 61000- 4-6</li> </ul>		to IEC 61000- 0.	15-80Mhz at 10V		
field-based interference according to IEC 61000-4-3		<b>00-4-3</b> 10	V/m		
electrostatic discharge according to IEC 61000-4-2		<b>0-4-2</b> 8	ΥV		
conducted HF interference emissions according to CISPR11		ng to 15	150 kHz 30 MHz Class A		
field-bound HF interference emission according to CISPR11		ng to CISPR11 30	30 1000 MHz Class A		
Supply voltage					
Supply voltage requ	iired Auxiliary voltage	No	)		
Display					
number of LEDs		3			
Approvals Certificate	s				
General Product Ap	oproval				
~ ~			Confirmation	$\sim$	
EG-Konf.	UK CA			(ŲL)	FHT
EG-Konf.	Functional Saftey	CCC Test Certificates	Marine / Shipping		FHT
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