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

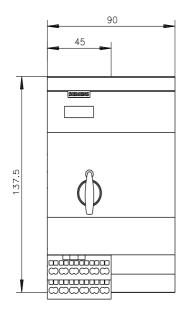
the second section data	
product brand name	SIRIUS
product designation	compact starter
design of the product	reversing starter
product type designation	3RA62
General technical data	
product function control circuit interface to parallel wiring	Yes
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
 at AC in hot operating state 	0.01 W
 at AC in hot operating state per pole 	0.01 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	2.475 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

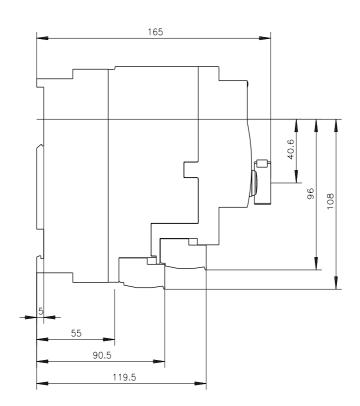
relative humidity during operation	10 90 %
Main circuit	
number of poles for main current circuit	3
adjustable current response value current of the current- dependent overload release	0.1 0.4 A
formula for making capacity limit current	120 x le
formula for limit current breaking capacity	100 x le
yielded mechanical performance for 4-pole AC motor	
 at 400 V rated value 	0.09 kW
 at 500 V rated value 	0.12 kW
• at 690 V rated value	0.18 kW
operating voltage at AC-3 rated value maximum	690 V
operational current	
 at AC at 400 V rated value 	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 operational current of auxiliary contacts at AC-12 maximum 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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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 0.27 A
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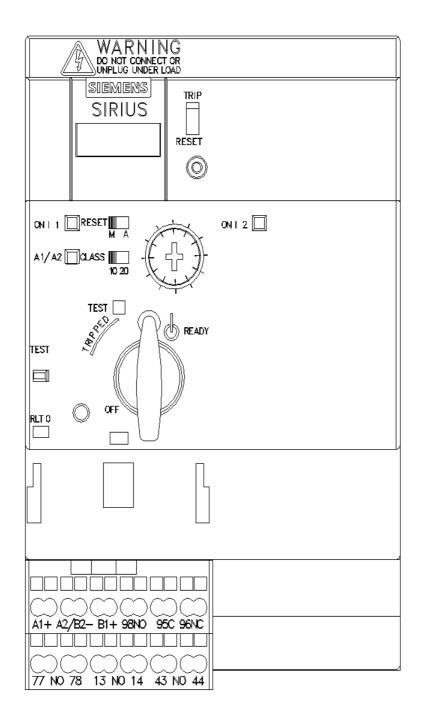
• at 480 V rated value	0.4 A
at 600 V rated value	0.4 A
contact rating of auxiliary contacts according to UL	contacts 21-22, 13-14, 43-44 Q600 / A600, contacts 77-78 R300 / B300, contacts 95-96-98 R300 / D300
Short-circuit protection	
product function short circuit protection	Yes
design of short-circuit protection	electromagnetic
design of the fuse link	
 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 requiredfor short-circuit protection of the signaling switch of the	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 ²), 1x 10 mm ²
 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 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	
 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
61000-4-5	

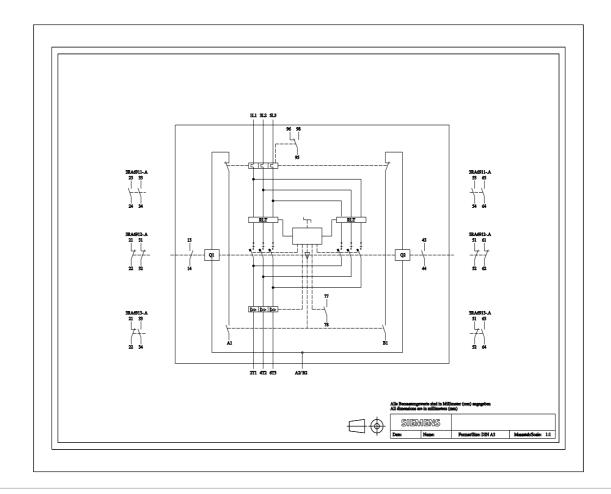
 due to high-frequency radiation according to IEC 61000- 4-6 		to IEC 61000- 0.	15-80Mhz at 10V		
field-based interference according to IEC 61000-4-3		00-4-3 10	V/m		
electrostatic discharge according to IEC 61000-4-2		0-4-2 8	ΥV		
conducted HF interference emissions according to CISPR11		ng to 15	150 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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EMV	Functional Saftey	Type Test Certific-			EHL

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