SIEMENS

Data sheet

3RA6250-2CP32



SIRIUS Compact load feeder Reversing starter 690 V 110...240 V AC/DC 50...60 Hz 1...4 A IP20 Connection main circuit: Spring-type terminal 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 	6 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
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	Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleititanzirkonoxid - 12626-81-2 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7
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	1 4 A				
formula for making capacity limit current	12 x le				
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	4 500 M				
— 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	240 V				
• at 50 Hz	110 240 V				
• at 60 Hz	110 240 V				
control supply voltage frequency					
• 1 rated value	50 Hz				
2 rated value	60 Hz				
control supply voltage 1					
 at DC rated value 	240 V				
• at DC	110 240 V				
holding power					
at AC maximum	6 W				
● at DC maximum	5.1 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				
	1 10 A				
release for signaling contact					
release for signaling contact operational current of auxiliary contacts at AC-12 maximum	10 A				
release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V	10 A				
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	10 A 0.27 A				
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	10 A 0.27 A				
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 operating short-circuit current breaking capacity (Ics)	10 A 0.27 A CLASS 10 and 20 adjustable				
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 operating short-circuit current breaking capacity (Ics) • at 400 V • at 500 V rated value	10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA				
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 operating short-circuit current breaking capacity (Ics) • at 400 V • at 500 V rated value • at 690 V rated value	10 A 0.27 A CLASS 10 and 20 adjustable 53 kA				
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 operating short-circuit current breaking capacity (Ics) • at 400 V • at 500 V rated value • at 690 V rated value UL/CSA ratings	10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA				
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 operating short-circuit current breaking capacity (Ics) • at 400 V • at 500 V rated value • at 690 V rated value	10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA				

	4.4
• at 600 V rated value	4 A
yielded mechanical performance [hp] for 3-phase AC motor	0.751
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	cicotoniughoto
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 	4A gL/gG/400V
overload release required	
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	spring-loaded 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 mm ²)
 finely stranded without core end processing 	2x (1.5 6 mm ²)
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 mm ²)
 finely stranded without core end processing 	2x (0.25 1.5 mm ²)
 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 %
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
B10 value with high demand rate according to SN 31920	3 000 000
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	
• 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

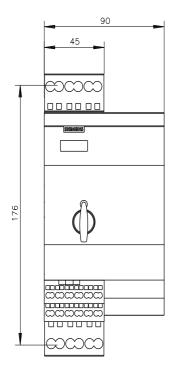
 due to conducto 61000-4-5 	r-conductor surge accordi	ng to IEC 2	2 kV main contacts, 1 kV auxiliary contacts				
 due to high-frequence 4-6 	uency radiation according	to IEC 61000- 0	0.15-80Mhz at 10V				
field-based interference according to IEC 61000-4-3		00-4-3 1	10 V/m				
electrostatic discharge according to IEC 61000-4-2			kV				
conducted HF interference emissions according to CISPR11			50 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		Ν	No				
Display							
number of LEDs		3					
Approvals Certificates							
General Product App	proval			EMC	Functional Safety/Safety of Ma- chinery		
	<u>Confirmation</u>		EHC	RCM			
Declaration of Confo	rmity	Test Certificates	Marine / Shipping				
UK CA	CE EG-Konf.	<u>Type Test Certific</u> ates/Test Report			Lloyd's Register urs		
Marine / Shipping	other	Dangerous Good					
PRS	<u>Confirmation</u>	<u>Transport Informati</u>	<u>n</u>				
Further information	to ovit the Pussion	kat (saa here)					
	I to exit the Russian mar com/global/en/pressreleas		-russian-business				
Please contact your loc EAC relevant market (Information on the pa https://support.industry	other than the sanctioned ackaging siemens.com/cs/ww/en/v	status of validity of the EAEU member states riew/109813875	EAC certification if you inte	end to import or offer to s	supply these products to an		
https://www.siemens.c	vnloadcenter (Catalogs, om/ic10	Brochures,)					
Industry Mall (Online https://mall.industry.sie Cax online generator	ordering system) mens.com/mall/en/en/Ca			222			
Service&Support (Ma https://support.industry	nuals, Certificates, Char siemens.com/cs/ww/en/p	racteristics, FAQs,) ps/3RA6250-2CP32					
	Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6250-2CP32⟨=en						

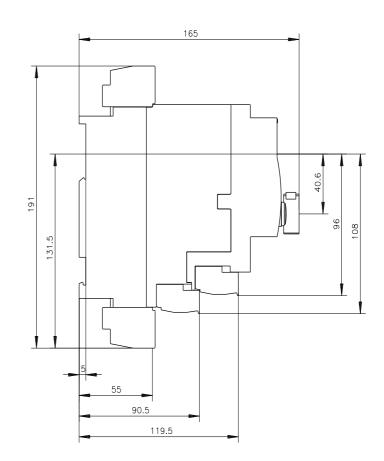
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6250-2CP32&lang=en

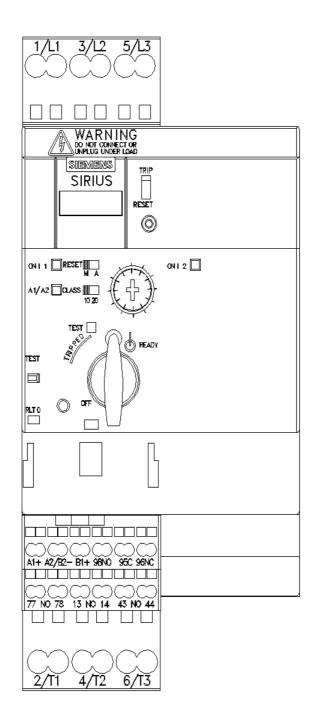
Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RA6250-2CP32/char

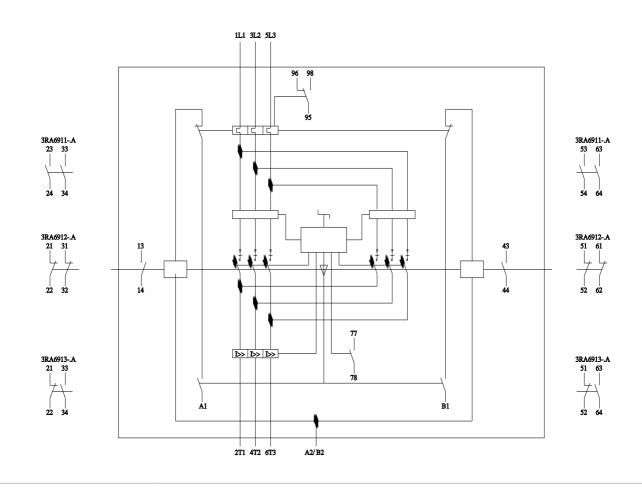
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6250-2CP32&objecttype=14&gridview=view1









last modified:

8/7/2023 🖸