## **SIEMENS**

## Data sheet

## 3RA6250-2EB32



SIRIUS, COMPACT STARTER, REVERSING STARTER 400 V, 24 V AC/DC, 50 ... 60 HZ, 8 ... 32 A, IP20, MAIN CIRCUIT CONNECTION: SPRING-LOADED TERMINAL, AUXILIARY CIRCUIT CONNECTION: SPRING-LOADED TERMINAL

product brand name	SIRIUS
Product designation	compact starter
Design of the product	reversing feeder

General technical data:		
Product function		
<ul> <li>Control circuit interface to parallel wiring</li> </ul>		Yes
Insulation voltage		
Rated value	V	690
maximum permissible voltage for safe isolation		
<ul> <li>between auxiliary and auxiliary circuit</li> </ul>	V	250
<ul> <li>between control and auxiliary circuit</li> </ul>	V	300
<ul> <li>between main and auxiliary circuit</li> </ul>	V	400
Degree of pollution		3
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
Surge voltage resistance Rated value	V	6 000
Mechanical service life (switching cycles)		
<ul> <li>of the main contacts typical</li> </ul>		10 000 000
<ul> <li>of the auxiliary contacts typical</li> </ul>		10 000 000
<ul> <li>of the signaling contacts typical</li> </ul>		10 000 000
Electrical endurance (switching cycles) of the		
auxiliary contacts		
• at DC-13 at 6 A at 24 V typical		100 000
• at AC-15 at 6 A at 230 V typical		500 000

Electrical endurance (switching cycles) of the signaling contacts • at DC-13 at 6 A at 24 V typical100 000• at AC-15 at 6 A at 230 V typical500 000Type of assignmentcontinous operation according to IEC 60947-6-2Protection class IPIP20Equipment marking • acc. to DIN EN 61346-2QMain circuit:Kenter State
• at DC-13 at 6 A at 24 V typical100 000• at AC-15 at 6 A at 230 V typical500 000Type of assignmentcontinous operation according to IEC 60947-6-2Protection class IPIP20Equipment markingQ
• at AC-15 at 6 A at 230 V typical500 000Type of assignmentcontinous operation according to IEC 60947-6-2Protection class IPIP20Equipment marking • acc. to DIN EN 61346-2Q
Type of assignment       continous operation according to IEC 60947-6-2         Protection class IP       IP20         Equipment marking       Q
Protection class IP     IP20       Equipment marking     Q
Equipment marking     Q       • acc. to DIN EN 61346-2     Q
• acc. to DIN EN 61346-2 Q
Main circuit
Number of poles for main current circuit     3
Adjustable response value current of the current-       A       8 32         dependent overload release       A       8 32
Formula for making capacity limit current   12 x le
Formula for interruption capacity limit current     10 x le
Mechanical power output for 4-pole AC motor
• at 400 V Rated value kW 15
Operating voltage
• at AC-3 Rated value maximum V 400
Operating current
• with AC at 400 V Rated value A 32
• at AC-43
- at 400 V Rated value A 29
Operating power
• at AC-3
- at 400 V Rated value kW 15
• at AC-43
- at 400 V Rated value W 15 000
Operating frequency
• at AC-41 acc. to IEC 60947-6-2 maximum 1/h 750
• at AC-43 acc. to IEC 60947-6-2 maximum 1/h 250
No-load switching frequency 1/h 3 600
Control circuit/ Control:
Type of voltage AC
Control supply voltage 1 with AC
• at 50 Hz Rated value V 24
• at 60 Hz Rated value V 24
Control supply voltage 1
• for DC Rated value V 24
Rated value     Hz     50
Control supply voltage frequency 2 Rated value Hz 60
Holding power
• with AC maximum W 3.5

• for DC maximum	W	3.1
Auxiliary circuit:		
Number of NC contacts		
<ul> <li>for auxiliary contacts</li> </ul>		0
Number of NO contacts	-	
<ul> <li>for auxiliary contacts</li> </ul>		2
<ul> <li>of the instantaneous short-circuit release for signaling contact</li> </ul>		1
Number of CO contacts	-	
<ul> <li>of the current-dependent overload release for signaling contact</li> </ul>		1
Product expansion Auxiliary switch	-	Yes
Operating current of the auxiliary contacts at AC-12 maximum	A	10
Operating current of the auxiliary contacts at DC-13		
• at 250 V	А	0.27
Protective and monitoring functions:		
Trip class		CLASS 10 and 20 adjustable
OFF-delay time	ms	50
Operational short-circuit current breaking capacity (Ics)	_	
• at 400 V	kA	53
UL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	А	32
yielded mechanical performance [hp]	-	
<ul> <li>for three-phase AC motor at 200/208 V Rated value</li> </ul>	metric hp	7.5
<ul> <li>for three-phase AC motor at 220/230 V Rated value</li> </ul>	metric hp	10
<ul> <li>for three-phase AC motor at 460/480 V Rated value</li> </ul>	metric hp	20
Contact rating of the auxiliary contacts acc. to UL		contacts 21-22, 13-14, 43-44 Q600 / A600, contacts 77-78 R300 / B300, contacts 95-96-98 R300 / D300
Short-circuit:		
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 short-circuit release required</li> </ul>		6A gL/gG/400V

• for short-circuit protection of the signaling switch of the overload release required

4A gL/gG/400V

tallation/ mounting/ dimensions: ounting position		any
recommended		vertical, on horizontal standard mounting rail
Mounting type	-	screw and snap-on mounting
Height	mm	191
Width	mm	90
Depth	mm	165
Connections/ Terminals:		
Type of electrical connection		
<ul> <li>for main current circuit</li> </ul>		spring-loaded terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>		spring-loaded terminals
Product function		
<ul> <li>removable terminal for main circuit</li> </ul>		Yes
<ul> <li>removable terminal for auxiliary and control circuit</li> </ul>		Yes
Type of connectable conductor cross-section		
• for main contacts		
— solid		2x (2.5 6 mm²), 1x 10 mm²
— finely stranded with core end processing		2x (2.5 6 mm²)
<ul> <li>finely stranded without core end processing</li> </ul>		2x (2.5 6 mm²)
• for AWG conductors for main contacts		2x (14 10), 1x 8
<ul> <li>for auxiliary contacts</li> </ul>		
— solid		2x (0.25 1.5 mm²)
— finely stranded with core end processing		2x (0.25 1.5 mm²)
<ul> <li>finely stranded without core end processing</li> </ul>		2x (0.25 1.5 mm²)
• for AWG conductors for auxiliary contacts		2x (24 16)
Safety related data:		
B10 value with high demand rate acc. to SN 31920		2 000 000
Proportion of dangerous failures		
• with low demand rate acc. to SN 31920	%	40
• with high demand rate acc. to SN 31920	%	50
Failure rate [FIT] with low demand rate acc. to SN 31920	FIT	100
T1 value for proof test interval or service life acc. to IEC 61508	У	20
Protection against electrical shock		finger-safe

Product function Bus communication		No	
Product function Control circuit interface with IO link	-	No	
Ambient conditions:			
Installation altitude at height above sea level	m	2 000	
maximum			
Ambient temperature			
<ul> <li>during operation</li> </ul>	°C	-20 +60	
<ul> <li>during storage</li> </ul>	°C	-55 +80	
during transport	°C	-55 +80	
Relative humidity during operation	%	10 90	
Electromagnetic compatibility:			
Conducted interference due to burst acc. to IEC 61000-4-4		4 kV main contacts, 2 kV auxiliary contacts	
Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5		4 kV main contacts, 2 kV auxiliary contacts	
Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5		2 kV main contacts, 1 kV auxiliary contacts	
Conducted interference due to high-frequency radiation acc. to IEC 61000-4-6		0.15-80Mhz at 10V	
Field-bound parasitic coupling acc. to IEC 61000-4-3		10 V/m	
Electrostatic discharge acc. to IEC 61000-4-2		8 kV	
Supply voltage:			
Supply voltage required Auxiliary voltage		No	
Certificates/ approvals:			

General Produc	t Approval			EMC	Functional Safety/Safety of Machinery
	CSA		EHC	C-TICK	VDE
Test Certificates	Shipping Appro	val			
<u>Type Test</u> Certificates/Test <u>Report</u>	BUREAU VERITAS	ĴÅ DNV DNV	Lloyd's Register LRS	PRS	RINA
Shipping Approval	other				
RMRS	Environmental Confirmations	Declaration of Conformity	<u>other</u>		

## Further information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

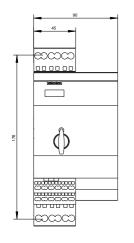
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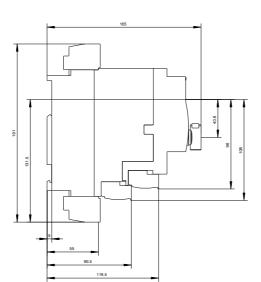
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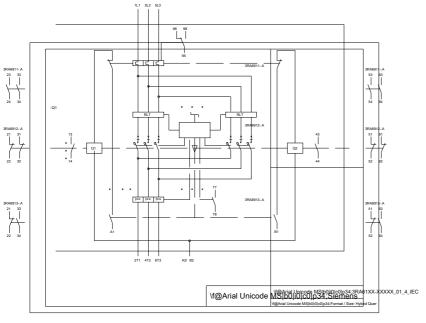
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Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RA62502EB32/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA62502EB32&lang=en







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