## **SIEMENS**

Data sheet 3RA6250-1AB34



SIRIUS, COMPACT STARTER, REVERSING STARTER 690 V, 24 V AC/DC, 50 ... 60 HZ, 0.1 ... 0.4 A, IP20, MAIN CIRCUIT CONNECTION: SCREW TERMINAL, AUXILIARY CIRCUIT CONNECTION: PLUG-IN, W/O TERMINALS

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 typical	100 000
● at AC-15 at 6 A at 230 V typical	500 000
Type of assignment	continous operation according to IEC 60947-6-2
Protection class IP	IP20
Equipment marking	
• acc. to DIN EN 61346-2	Q

Main circuit:		
Number of poles for main current circuit		3
Adjustable response value current of the current-	Α	0.1 0.4
dependent overload release		
Formula for making capacity limit current		120 x le
Formula for interruption capacity limit current		100 x le
Mechanical power output for 4-pole AC motor		
• at 400 V Rated value	kW	0.09
● at 500 V Rated value	kW	0.12
• at 690 V Rated value	kW	0.18
Operating voltage		
<ul> <li>at AC-3 Rated value maximum</li> </ul>	V	690
Operating current		
<ul> <li>with AC at 400 V Rated value</li> </ul>	Α	0.4
● at AC-43		
— at 400 V Rated value	Α	0.3
— at 500 V Rated value	Α	0.32
— at 690 V Rated value	Α	0.35
Operating power		
• at AC-3		
— at 400 V Rated value	W	90
• at AC-43		
— at 400 V Rated value	W	90
— at 500 V Rated value	W	120
— at 690 V Rated value	W	180
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	2.8
• for DC maximum	W	2.9
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	А	10
Operating current of the auxiliary contacts at DC-13		
● at 250 V	Α	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
• at 500 V Rated value	kA	3
• at 690 V Rated value	kA	3
JL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	Α	0.4
• at 600 V Rated value	Α	0.4
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:		
Short-circuit: Product function Short circuit protection		Yes
Short-circuit: Product function Short circuit protection Design of short-circuit protection		Yes electromagnetic
Product function Short circuit protection		

<ul> <li>for short-circuit protection of the signaling</li> </ul>
switch of the short-circuit release required

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

6A gL/gG/400V
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4A gL/gG/400V

Installation/ mounting/ dimensions:		
mounting position		any
• recommended		vertical, on horizontal standard mounting rail
Mounting type		screw and snap-on mounting
Height	mm	170
Width	mm	90
Depth	mm	165

Connections/ Terminals:	
Type of electrical connection	
• for main current circuit	screw-type terminals
<ul> <li>for auxiliary and control current circuit</li> </ul>	plug-in without 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 (1.5 6 mm²), 1x 10 mm²
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1.5 6 mm²)
<ul> <li>for AWG conductors for main contacts</li> </ul>	2x (16 10), 1x 8
<ul> <li>for auxiliary contacts</li> </ul>	
— 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)
<ul> <li>for AWG conductors for auxiliary contacts</li> </ul>	2x (20 14)

Safety related data:		
B10 value with high demand rate acc. to SN 31920		3 000 000
Proportion of dangerous failures		
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	%	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

Communication/ Protocol:	
Product function Bus communication	No
Product function Control circuit interface with IO link	No

Ambient conditions:		
Installation altitude at height above sea level maximum	m	2 000
Ambient temperature		
<ul> <li>during operation</li> </ul>	°C	-20 <b>+</b> 60
during storage	°C	-55 <b>+</b> 80
during transport	°C	-55 <b>+</b> 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 Product Approval**

**EMC** 

Functional Safety/Safety of Machinery













rest
Certificates

**Shipping Approval** 

Type Test
Certificates/Test
Report











Shipping Approval other

Approval

Declaration of Conformity

Environmental Confirmations

other



## Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

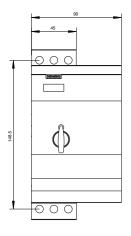
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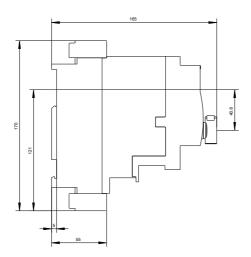
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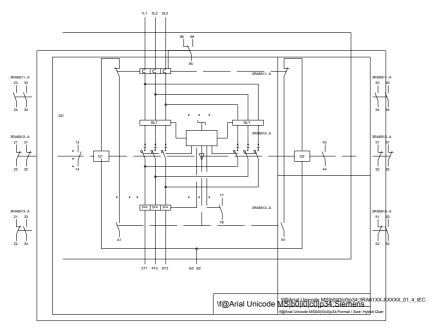
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RA62501AB34/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA62501AB34&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA62501AB34&lang=en</a>







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