SIEMENS

Data sheet 3RA6250-1EB33



SIRIUS, COMPACT STARTER, REVERSING STARTER 400 V, 24 V AC/DC, 50 ... 60 HZ, 8 ... 32 A, IP20, MAIN CIRCUIT CONNECTION: PLUG-IN, W/O TERMINALS, AUXILIARY CIRCUIT CONNECTION: SCREW TERMINAL

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

General technical data:		
Product function		
 Control circuit interface to parallel wiring 		Yes
Insulation voltage		
Rated value	V	690
maximum permissible voltage for safe isolation		
 between auxiliary and auxiliary circuit 	V	250
 between control and auxiliary circuit 	V	300
 between main and auxiliary circuit 	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)		
 of the main contacts typical 		10 000 000
 of the auxiliary contacts typical 		10 000 000
 of the signaling contacts typical 		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:		
Main circuit: Number of poles for main current circuit		3
Number of poles for main current circuit Adjustable response value current of the current-	A	3 8 32
Number of poles for main current circuit	A	
Number of poles for main current circuit Adjustable response value current of the current-	A	
Number of poles for main current circuit Adjustable response value current of the current- dependent overload release	A	8 32
Number of poles for main current circuit Adjustable response value current of the current- dependent overload release Formula for making capacity limit current	A	8 32 12 x le
Number of poles for main current circuit Adjustable response value current of the current- dependent overload release Formula for making capacity limit current Formula for interruption capacity limit current	A	8 32 12 x le
Number of poles for main current circuit Adjustable response value current of the current- dependent overload release Formula for making capacity limit current Formula for interruption capacity limit current Mechanical power output for 4-pole AC motor		8 32 12 x le 10 x le

Α

Α

kW

W

1/h

1/h

32

29

15

15 000

750

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	

Operating current

• at AC-43

Operating power

• at AC-3

• at AC-43

Operating frequency

• with AC at 400 V Rated value

- at 400 V Rated value

- at 400 V Rated value

- at 400 V Rated value

• at AC-41 acc. to IEC 60947-6-2 maximum

• at AC-43 acc. to IEC 60947-6-2 maximum

• for DC maximum	W	3.1
Auxiliary circuit:		
Number of NC contacts		
• for auxiliary contacts		0
Number of NO contacts		
• for auxiliary contacts		2
 of the instantaneous short-circuit release for signaling contact 		1
Number of CO contacts		
 of the current-dependent overload release for signaling contact 		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	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
	kA	53
● at 400 V	kA	53
• at 400 V UL/CSA ratings:	kA A	32
at 400 V UL/CSA ratings: Full-load current (FLA) for three-phase AC motor		
at 400 V UL/CSA ratings: Full-load current (FLA) for three-phase AC motor at 480 V Rated value		
at 400 V UL/CSA ratings: Full-load current (FLA) for three-phase AC motor at 480 V Rated value yielded mechanical performance [hp] for three-phase AC motor at 200/208 V Rated	A metric	32
at 400 V UL/CSA ratings: Full-load current (FLA) for three-phase AC motor at 480 V Rated value yielded mechanical performance [hp] for three-phase AC motor at 200/208 V Rated value for three-phase AC motor at 220/230 V Rated	A metric hp metric	7.5
at 400 V UL/CSA ratings: Full-load current (FLA) for three-phase AC motor at 480 V Rated value yielded mechanical performance [hp] for three-phase AC motor at 200/208 V Rated value for three-phase AC motor at 220/230 V Rated value	A metric hp metric hp	32 7.5 10
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at 400 V UL/CSA ratings: Full-load current (FLA) for three-phase AC motor at 480 V Rated value yielded mechanical performance [hp] for three-phase AC motor at 200/208 V Rated value for three-phase AC motor at 220/230 V Rated value for three-phase AC motor at 460/480 V Rated value Contact rating of the auxiliary contacts acc. to UL	A metric hp metric hp metric	32 7.5 10 20 contacts 21-22, 13-14, 43-44 Q600 / A600, contacts
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switch of the short-circuit release required

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

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	plug-in without terminals
 for auxiliary and control current circuit 	screw-type terminals
Product function	
 removable terminal for main circuit 	Yes
 removable terminal for auxiliary and control circuit 	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)
 for AWG conductors for main contacts 	2x (14 10), 1x 8
 for auxiliary contacts 	
— 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)
 for AWG conductors for auxiliary contacts 	2x (20 14)

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

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		
 during operation 	°C	-20 +60
during storage	°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 Product Approval

EMC

Functional Safety/Safety of Machinery













lest	
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

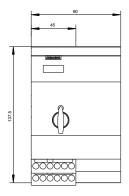
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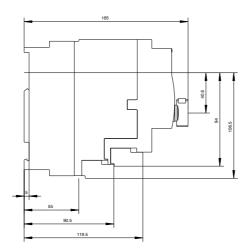
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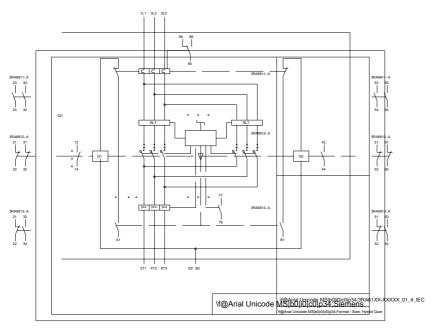
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RA62501EB33/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=3RA62501EB33&lang=en







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