## **SIEMENS**

## Data sheet

## 3RA6250-0AB30



SIRIUS, COMPACT STARTER, REVERSING STARTER 690 V, 24 V AC/DC, 50 ... 60 HZ, 0.1 ... 0.4 A, IP20, MAIN CIRCUIT CONNECTION: PLUG-IN, W/O TERMINALS, 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		
<ul> <li>Rated value</li> </ul>	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		
<ul> <li>at DC-13 at 6 A at 24 V typical</li> </ul>		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- dependent overload release	A	0.1 0.4
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>	А	0.4
• at AC-43		
— at 400 V Rated value	А	0.3
— at 500 V Rated value	А	0.32
— at 690 V Rated value	А	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		
<ul> <li>for DC Rated value</li> </ul>	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	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

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

UL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	А	0.4
• at 600 V Rated value	А	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:	
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</li> </ul>		6A gL/gG/400V
switch of the short-circuit release required		
• for short-circuit protection of the signaling		4A gL/gG/400V
switch of the overload release required		
Installation/ mounting/ dimensions:		
mounting position		any
<ul> <li>recommended</li> </ul>		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		plug-in without terminals
Product function		
<ul> <li>removable terminal for main circuit</li> </ul>		Yes
<ul> <li>removable terminal for auxiliary and control</li> </ul>		Yes
circuit		
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
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	%	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	У	20
IEC 61508		
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	m	2 000
maximum		
Ambient temperature		
<ul> <li>during operation</li> </ul>	°C	-20 +60
• during storage	°C	-55 +80
• during transport	°C	-55 +80
Relative humidity during operation	%	10 90
Electromagnetic compatibility:		

Conducted interfere 61000-4-4	nce due to burst acc.	to IEC	4 kV main	contacts, 2 kV aux	iliary contacts	
Conducted interfere acc. to IEC 61000-4	nce due to conductor -5	-earth surge	4 kV main contacts, 2 kV auxiliary contacts			
Conducted interfere surge acc. to IEC 61	nce due to conductor 1000-4-5	-conductor	2 kV main contacts, 1 kV auxiliary contacts			
Conducted interfere radiation acc. to IEC	nce due to high-frequ 61000-4-6	ency	0.15-80Mhz at 10V			
Field-bound parasiti	c coupling acc. to IEC	C 61000-4-3	10 V/m			
Electrostatic dischar	rge acc. to IEC 61000	-4-2	8 kV			
Supply voltage:						
	ired Auxiliary voltage		No			
Certificates/ approv	als:					
General Produc	t Approval			EMC	Functional Safety/Safety of Machinery	
CCC	CSA		EHC	С-тіск	VDE	
Test Certificates	Shipping Approv	val				
<u>Type Test</u> Certificates/Test <u>Report</u>	B U R E A U VE R I TAS		Lloyd's Register LRS	PRS	RINA	
Shipping Approval	other					
RMRS	Declaration of Conformity	Environmental Confirmations	other			

Further information

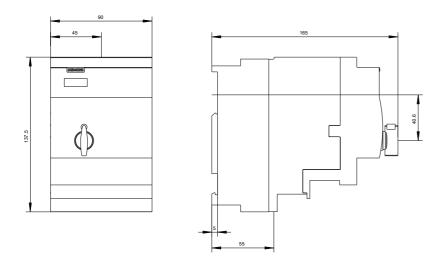
Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

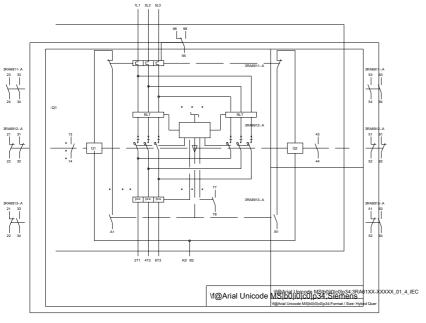
Industry Mall (Online ordering system) http://www.siemens.com/industrymall

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA62500AB30

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RA62500AB30/all





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